DOCUMENT RESUME

ED 350 414 CE 062 084

TITLE	Skills and Tasks for Jobs. A SCANS Report for America 2000.
INSTITUTION	Department of Labor, Washington, DC. Secretary's Commission on Achieving Necessary Skills.
PUB DATE	91
NOTE	545p.; For related documents, see ED 332 054 and ED 346 348.
AVAILABLE FROM	Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 (order no. 029-000-00437-4: $27).
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF02/PC22 Plus Postage.
DESCRIPTORS	Competency Based Education; Difficulty Level; Education Work Relationship; Employment Qualifications; *Job Analysis; *Job Skills; *Labor Force Development; *Occupational Information; Postsecondary Education; Secondary Education; Skill Analysis; Task Analysis; Vocational Education

ABSTRACT

This report identifies generic competencies (skills necessary for success in the workplace) and foundations (skills and qualities underlying the competencies). Chapter 1 explains use of this report to help educators make high school courses more relevant to the needs of a modern work force and to help employers ensure that their employees possess appropriate, up-to-date skills. Development of the material is described. Chapter 2 contains definitions of the Secretary's Commission on Achieving Necessary Skills (SCANS) competencies and foundation skills, followed by displays of job tasks in descending levels of difficulty. A two-page display of each competency/foundation skill provides a definition of the skill and illustrative tasks, along with corresponding job titles. Tasks are arranged in rows, with a maximum of three distinct tasks per row. Rows are arranged in ascending order of difficulty. Chapter 3 lists the task descriptions of 35 jobs clustered in the following areas: health and human services; office, financial services, government; accommodations and personal business; manufacturing, agribusiness, mining, construction; and trade, transportation, and communication. Chapter 3 also contains information about the importance of the competency and foundation skills required for these jobs. Two tables present the means and standard deviations of the ratings for all jobs for competencies and foundation skills determined through interviews with people holding these jobs. Information is then provided for each job, grouped by the five sectors of the economy. For each job, a brief general description is given. Next, the mean and standard deviations of the competencies and foundations are shown for that job. Following these data, illustrative tasks are provided that demonstrate the use of some skills. The appendix contains information on 15 additional jobs. (YLB)

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SKILLS AND TASKS FOR JOBS

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A SCANS REPORT FOR AMERICA 2000

THE SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS
U.S. DEPARTMENT OF LABOR

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ACKNOWLEDGEMENTS

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Chapter 1

Introduction

Chapter 1. Introduction

THE COMMISSION

The Secretary's Commission on Achieving Necessary Skills (SCANS) was established in February 1990 to examine the demands of the work place and to determine whether the current and future workforce is capable of meeting those demands. Commission members included 31 representatives from the nation's schools, businesses, unions and government. The Commission issued its first report, "What Work Requires of Schools," in June, 1991. This report told educators and employers what students and workers need to know and be able to do in order to succeed in the work place. This kind of information is especially vital today, when more than half of our young people leave school without the basic skills required to find and hold a good job.

Specifically, the Commission was directed to advise the Secretary of Labor on the type and level of skills required to enter employment. In carrying out this charge, the Commission was asked to:

(1) Define the skills needed for employment;

(2) Propose acceptable levels in those skills;

(3) Suggest effective ways to assess proficiency; and

(4) Develop a strategy to disseminate the findings to the nation's schools, businesses and homes.

In its first report, the Commission identified two types of skills: competencies and foundations. Competencies are the skills necessary for success in the work place and are organized into five areas. Foundations are skills and qualities that underlie the competencies. The competencies and foundations are generic—most of them are required for most jobs. Table 1-1 lists the SCANS competencies, and Table 1-2 lists the SCANS foundations.

A number of states and local school districts have begun to take steps to impart SCANS skills to their students:

- Students in Fort Worth, Texas, schools are studying the SCANS materials and learning the skills.
- The Los Angeles Unified School District (LAUSD) has announced that it will "guarantee" that its graduates (after 1994) will be proficient in the

SCANS competencies and foundations. LAUSD will provide free adult classes for graduates that do not meet these standards.

- The states of Florida and Oregon, the cities of Louisville and Tampa, and the region surrounding Pittsburgh are other places where active consideration is being given to the SCANS skills.

- There was a state-wide telecast in Indiana in January, 1992, at which time students in five high schools reported on research they did in 1991 to find out if the SCANS skills are needed in Indiana work places.

Within the Department of Labor, plans are going forward to introduce the SCANS skills into the Job Corps and other Job Training Partnership Act (JTPA) programs. Some summer youth programs may be implementing SCANS as early as the Summer of 1992. Industry is also considering SCANS. For example, the Alliance (a joint program of AT&T and its unions, the Communication Workers of America and the International Brotherhood of Electrical Workers) has been asking its vendors to "crosswalk" their materials to the SCANS skills.

Table 1-1. SCANS Competencies

Resources	Allocates Time
	Allocates Money
	Allocates Material and Facility Resources
	Allocates Human Resources
Information	Acquires and Evaluates Information
	Organizes and Maintains Information
	Interprets and Communicates Information
	Uses Computers to Process Information
Interpersonal	Participates as a Member of a Team
	Teaches Others
	Serves Clients/Customers
	Exercises Leadership
	Negotiates to Arrive at a Decision
	Works with Cultural Diversity
Systems	Understands Systems
	Monitors and Corrects Performance
	Improves and Designs Systems
Technology	Selects Technology
	Applies Technology to Task
	Maintains and Troubleshoots Technology

Table 1-2. SCANS Foundation Skills

Basic Skills	Reading
	Writing
	Arithmetic
	Mathematics
	Listening
	Speaking
Thinking Skills	Creative Thinking
	Decision Making
	Problem Solving
	Seeing Things in the Mind's Eye
	Knowing How to Learn
	Reasoning
Personal Qualities	Responsibility
	Self-Esteem
	Social
	Self-Management
	Integrity/Honesty

USE OF THIS REPORT

This SCANS report issued by the Commission is designed to help educators make high school courses more relevant to the needs of a modern workforce and to help employers ensure that their employees possess appropriate, up-to-date skills. There are two ways the report can be used—one is to focus on the SCANS competencies and foundations, and the other is to focus on jobs.

The Skills. If your primary interest is in the SCANS competencies and foundations, turn to Chapter 2. Each of the competencies and foundations is defined, along with a set of illustrative tasks for each skill, displayed in descending levels of difficulty. These skills are generic or common to many different jobs. This information should prove useful for teachers, curriculum developers, and others who are concerned primarily with ensuring that the skills are taught in their courses.

The Jobs. If your primary interest is in jobs and how the SCANS skills are used in jobs, turn to Chapter 3, which provides information on 35 jobs. For each job, you will find the SCANS competencies and foundations rated in descending order of importance or "criticality" for that job. This rating indicates the degree to which the skill is important/required for performance of specific job tasks and duties. It ranges from 1 to 5, as listed below:

Rating	Definition
1	Not Critical
2	Somewhat Critical
3	Moderately Critical
4	Highly Critical
5	Extremely Critical

The rating represents the combined judgment of persons (three to five) performing or supervising the job. The following pages illustrate the use of the SCANS foundations and competencies by describing tasks of particular jobs. If you are interested in a certain job, look in these pages for the particular job that most closely matches the one in which you are interested. If your interests are more general, review all the jobs. Table 1-3 (shown on page 1-12) lists the titles of 50 jobs included in the SCANS analyses. (Chapter 3 contains detailed information on 35 jobs. The Appendix contains information on 15 additional jobs studied during the first phase of SCANS research. Because competency and foundation definitions were different for this earlier phase, this information is presented separately.)

Three examples of how this report can be used by educators and employers are given below. The first example describes how a curriculum director can use this report to guide the incorporation of SCANS competencies/foundations into a mathematics course. The second example describes how a job counselor can assist employees who need to find new vocational opportunities due to changes in a company's mission. The final example describes how the skill ratings of various jobs could influence a training director's decisions concerning the content of training. It also shows how SCANS skills can be used to form decisions about the level of difficulty for the skills that may be taught.

Use by a Curriculum Developer. Individuals developing high school curricula will find this report a useful way to relate the teaching of high school subject matter to the skills required in the work place. It will help them teach these skills in existing or new curricula and develop instructional strategies. These skills can be taught in a range of courses, from art and music to science and mathematics. The following is a purely illustrative example using mathematics. The example concentrates on two skills: "allocates time" and "participates as a member of a team." In real learning situations, however, many more than two skills are taught simultaneously.

Abraham Lincoln High School has decided to incorporate the teaching of SCANS skills into its curricula. David Jones, a curriculum developer, has been given the assignment. He decides to start by working with the school's mathematics teachers.

David and the teachers begin by turning to page 3-5 (in Chapter 3) of the report and find the average (mean) ratings for all of the SCANS skills for all jobs surveyed.

David suggests that they concentrate on two of the highest rated competency skills—"participates as a member of a team" (mean = 4.24) and "allocates time" (4.19). They choose "allocates time" for the math class because scheduling is an activity that requires the use of mathematics. They also note that these two skills have low standard deviations, which indicates that most respondents agreed on the importance of these skills.

David and the teachers then turn to Chapter 2 and look at the definition and illustrative tasks under "allocating time" (pages 2-12 and 2-13). For the purposes of this exercise, they decide to shoot for the difficulty level located in the second row from the top and to use two weeks of the semester to teach "introductory scheduling." They also look at the information for "participates as a member of a team" in Chapter 2 and aim for the same row of difficulty on that chart (pages 2-28 and 2-29). During the first day of instruction, the teachers will hand out copies of pages 2-12 and 2-13 to their students and ask them each to come back with some examples of their own. The teachers decide they will, on the next day, divide the students into groups corresponding to the economic sectors shown across the top of Table 1-3. They will ask the students to create other "time allocation" problems around their own examples. The students will work on these problems over the remaining two weeks. Students may look at job tasks elsewhere in Chapter 3 to obtain a better context for the problems they have developed.

From this point, the teachers may describe the concepts that underlie many scheduling problems: estimating the time required to complete a task; organizing by tasks and deadlines; doing work in parallel vs. doing it in sequence, options which can affect the total project duration; reducing the duration by rearranging the sequence or adding more resources, and so on. In each case, the teacher showed a relationship between the importance of mathematics to mastering the task of time allocation and the importance of this competency in the world of work. The teachers then will ask each group to improve the scheduling in one of the examples they chose and to present their solutions to the class orally and in writing.

Use by a Job Counselor. Individuals who counsel students, workers, or unemployed adults should find this report useful to:

- Understand better the generic skills required in the work place.
- Describe how the skills are used in a variety of tasks that a worker is likely to encounter.

Estimates of the degree to which SCANS skills are important to all of the 50 jobs the Commission studied are provided in Chapter 3 and the Appendix (Tables 3-1 and 3-2 and A-3 and A-4.) The importance of these skills to other jobs is unknown, but we expect that most of the skills will be needed in most jobs, especially jobs similar to those analyzed. For example, a job counselor would find the report's analysis of the job "Hotel

Account Executive/Sales Executive" useful for many other sales executive positions. Let's explore how the job analyzing process could work.

Pete Smith is a job counselor at the XYZ firm. This company is going to shift from making computer components to selling a broad range of components through telemarketing. The company wishes to transfer workers who are now on the production line and to train them as telemarketers. There are also new openings in two other jobs: (1) traffic, shipping, and receiving clerk; and (2) expeditor and expeditor/purchasing agent.

Jim White meets with Pete and tells him that he is interested in a telemarketing job. Pete turns to Chapter 3 and finds the telemarketing job beginning on page 3-265. Pete and Jim look at pages 3-265 and 3-266 and find the most critical skills (e.g., "serves clients/customers" at the top of the competency list and "listening" and "speaking" at the top of the foundation list). All three of these skills have means of 5.00, meaning that all telemarketers interviewed for this report judged the skills to be extremely critical. Further down the list Pete and Jim find "uses computers to process information." It has a mean of 4.0 (highly critical), but a standard deviation of 2.0. The high standard deviation indicates that while 4.0 was the average rating, there was a great deal of variation depending on which job holder was responding.

Pete and Jim look at those skills, but Jim is not sure what they mean in the real world. They turn to page 3-267 and find a task description for "uses computers." They also find task descriptions for "speaking" on page 3-269. Jim now wonders whether he has or can learn the needed skills. To find out how all three of the skills are used in other jobs, Pete turns to Chapter 2, finds the skills in question, and looks at all the examples shown there. Jim and Pete then discuss where Jim meets the requirements, where he is deficient, and how those deficiencies might be remedied. Some of these deficiencies could be addressed by courses at the local community college. Also, the company might provide courses on-site, should there be a number of production-line workers whose situations are similar to Jim's. Jim now expresses interest in the other two job openings and the process is repeated for them.

Use by a Training Director. A training or program director working for an employer, a vocational or proprietary school, a community college, or a provider to the "second chance" system can use the information in this report to develop a curriculum or program. The training director could use the list of generic skills provided in Chapter 2 to develop a generic program or, as illustrated below, use the report to develop special training programs to meet a specific need.

Consider the following example. Mary Thomas is Director of Training Programs for the same XYZ company referred to previously. XYZ is changing from computer production to computer sales and service. Mary knows she has to develop training programs for the telemarketing positions (and the other two openings), and that most of the trainees will come from the manufacturing floor. She turns to Chapter 3 to find the skills likely needed for the three types of jobs that will open. She also reviews the likely skill profile for "plastic molding machine operator," beginning on page 3-223, which she feels will resemble the skills profile for the incumbents of the current manufacturing jobs.

Mary compares the likely incumbent skills profile to the likely required skills for the new jobs, and then estimates the gaps. For example, she turns to the telemarketing representative profile on pages 3-265 and 3-266 and finds that the telemarketing staff will likely need "listening" (mean of 5.0), "speaking" (5.0), and "uses computers to process information" (4.0), while most "plastic molding machine operator" jobs do not require all of these skills to the same extent (pages 3-223 and 3-224 show these skills to have mean ratings of 4.25, 3.25 and 1.00, respectively). With this preliminary gap-analysis as a guide, she investigates further to determine how much the telemarketing jobs at XYZ are likely to vary from the profile in the text. She also assesses the incumbents to see how they differ from the standard profile shown for the "plastic molding machine operator" job in the report. She will be especially careful where large standard deviations are reported—such as, for example, if no computers were to be used at XYZ.

Prior to developing course content, Mary turns to Chapter 2. She develops one curriculum for skills where the gap between the means is small (e.g. listening—4.25 for machine operators vs. 5.00 for telemarketers). Here, where the XYZ job incumbents are already likely to have the needed skills, she develops course content to help her classes learn how to transfer pre-existing skills to the new (telemarketing) context (face-to-face listening skills vs. over-the-telephone listening skills). She uses another approach for skills where the gap is large (e.g. uses computers—4.00 for telemarketers vs. 1.00 for machine operators). Here, she will develop content to help her class both learn the skills and apply them in the telemarketing context. For example, note the "uses computers" skill listed on pages 2-26 and 2-27. Telemarketing representatives included in the SCANS research use this skill at low levels of difficulty. Therefore, this skill may not need to be taught at a high level for XYZ telemarketers.

Obviously, the situation would change for Mary if the new applicants were recent high school graduates with different skills, or if she were working for a community college and the job openings were less certain. Even in these two cases, however, Mary could use Chapters 2 and 3 in a similar way.

HOW THE INFORMATION WAS DEVELOPED

Early in 1992, SCANS will issue a report detailing for the research community the research procedures used by SCANS. A brief summary of that report follows.

Initial Definitions of Skills. Early in the SCANS process, a group of experts was invited to identify the major types of skills required to enter employment and the names of the skills that comprised each of these types. (A list of the experts can be found in the Commission's June 1991 report.). Subsequently, a literature review was conducted to provide the information needed to write the first definitions of these skills. The initial definitions underwent several internal reviews and revisions by SCANS staff. They were then mailed to experts in each of the skill areas. These experts were asked to review and comment on the understandability, comprehensiveness, and redundancy of the skill definitions. Their comments were collected by telephone interviews after the experts had reviewed the materials. The definitions were then revised to reflect reviewers' comments.

Job Analysis Goals and Process. The skills that had been identified and defined at this point were used in the SCANS job analysis. The differences between this SCANS analysis and traditional job analysis will be described in the forthcoming report. The goals of the modified SCANS analysis were to evaluate the adequacy of the skill definitions, to demonstrate the level of importance of the skills in a sample of jobs, to identify specific job tasks that illustrate the use of the skills, and to collect information useful for assessment and training.

The SCANS job analysis was carried out in three steps: (1) small pilot tests to refine the methods; (2) analysis of 15 jobs; and (3) analysis of an additional 35 jobs. This sequence meant that the skills definitions and the job analyses changed as new information was collected and evaluated. A few skills were deleted or merged with other skills, and the language of the definitions was modified to clarify or expand the meanings.

The job analyses themselves were structured interviews with job experts (incumbents and supervisors of analyzed jobs) conducted by SCANS research staff, Department of Labor employees, or occupational analysts at state occupational analysis field centers. All analysts received training in the method of analysis developed for SCANS purposes. The interviews generally took two to four hours to complete and covered the following general areas: interviewee background, a brief general job description (the purpose of the job, major duties, and most important knowledge and skill), ratings of the importance ("criticality") of each SCANS skill for successful performance on the job, description of specific job tasks that illustrated the use of skills identified as highly critical for the job (4 or 5 on the scale), and descriptions of exemplary job performance. The interviewees were asked to identify unclear or confusing language in the skill definitions, redundancy across the skill definitions, and any missing skills.

After the pilot and Phase 1, the comments about the adequacy of the skill definitions were examined closely for use in improving and clarifying the definitions for Phase 2. In both Phase 1 and Phase 2, the ratings of the importance of the skills were analyzed for agreement among interviewees holding the same job and to compute average "criticality" of skills for each job and across all interviewees. (The results of these analyses, which appear in Chapter 3 and in the Appendix, are indicated by the means and standard deviations shown for each skill.)

Another goal was to illustrate various levels of difficulty for the SCANS skills by identifying tasks that could serve as exemplars. This analysis included the collection of judgments about the difficulty of the task with respect to the specific skill. These judgments were collected from 20 persons who had fairly broad experience in professional or research positions relevant to occupational issues. These judgments were averaged to identify the tasks that could serve as exemplars for levels of skill difficulty. The results of these analyses determined the rows assigned to each of the task descriptions shown in the tables in Chapter 2.

This job analysis is not definitive, since time and resources did not permit a large enough sample of occupations or of persons within occupations to generalize to all jobs in the American workforce. The Commission attempted, however, to select a wide variety of jobs thought to be in no danger of obsolescence, some of which were usually entered by high-school graduates and some by graduates of post-secondary education.

Occupations were also analyzed at various points in a meaningful career progression—that is, some at entry-level, others at the experienced-worker level, and still others at the supervisory level. Table 1-3 shows the names of the 50 jobs selected by the Commission and the job titles of the interviewees. The jobs were organized within five major sectors of the economy.

Job Analysis Results. Thirty-five organizations provided interviewees during Phase 1 of the job analysis and 111 during Phase 2. Sixty-two interviews were conducted for the 15 jobs in Phase 1 and 142 interviews were conducted for the 35 jobs in Phase 2. Interviewees holding the same job rated the importance of skills for their job. On average, there were four interviewees per job (the range was from three to six).

A high level of agreement was found for the judgments about the difficulty of the tasks in terms of SCANS skills. Chapter 2 contains the results of these analyses in the form of tasks arranged in order from lower to higher levels of required skill.

A NOTE OF CAUTION TO EMPLOYERS

Employers should be careful to conduct their own in-house research to verify the applicability of SCANS competencies and foundations to their jobs. Although the job analyses reported here were carefully conducted and produced reliable results, they cannot automatically be applied to particular jobs in specific organizations.

Table 1-3. Job Title of Interviewees by Economic Sector

	Health and Human Services	Office, Financial Services, and Government	Accommodations and Personal Services	Manufacturing, Agri-Business, Mining, and Construction	Trade, Transportation, and Communication
PHASE 1	Medical Records Technician	Bank Teller	Chef	Electrician	Truck Driver
	Registered Nurse	Underwriting Assistant	Front Desk Clerk	Numerical Control Drill Operator	Retail Salesperson
	Teacher's Aide	Secretary	Assistant Housekeeper	Offset Lithographic Press Operator	Inside Equipment Technician
PHASE 2	Childcare Aide	Personnel Specialist	Waiter/Waitress	Excavating Machine Operator	Traffic, Shipping and Receiving Clerk
	Dental Hygienist	Graphics Designer	Food Service Manager	Farmer	Order Filler
	Dietary Manager	Computer Operator	Industry Training Specialist	Carpenter	Outside Equipment Technician
	Licensed Practical Nurse	Programming Technician	Hotel Account Executive / Sales Executive	Construction Contractor	Truck Delivery Salesperson / Outside Sales
	Medical Assistant	Accounting / Financial Analyst	Hairstylist / Cosmetologist	Expeditor / Purchasing Agent	Telemarketing Representative
	Medical Technologist	Law Enforcement Officer	Beauty Shop Owner	Plastic Molding Machine Operator	Travel Agent
	Optician	Quality Control Inspector	Show Operations Supervisor	Blue Collar Worker Supervisor	Customer Service Representative

Chapter 2

Illustrative Tasks for Competencies and Foundation Skills

Chapter 2. Illustrative Tasks for Competencies and Foundation Skills

INTRODUCTION

This chapter contains definitions of the SCANS competencies and foundation skills (Table 2-1), followed by displays of job tasks in descending levels of difficulty on those skills.[1] As mentioned in the introductory chapter, the information in this chapter illustrates the way in which the SCANS competencies and foundation skills occur in actual job tasks.

For each competency/foundation skill, there are two pages presenting the information, arranged so that both pages are visible. Definition of the skill appears at the top of the display. Underneath the definition are the illustrative tasks (along with corresponding job titles). These tasks are arranged in rows, with a maximum of three distinct tasks appearing in a row. Tasks that appear in the same row were judged to be approximately equally difficult (see section on "How the Information Was Developed" in Chapter 1). The rows are arranged in ascending order of difficulty, with the most difficult tasks appearing higher (or nearer the definition). The display has been marked "Higher" and "Lower."

Performing the tasks displayed under a particular competency or foundation skill also requires the exercise of other skills. This is one of the most important points to observe. Performing on the job requires the exercise of multiple skills in concert. It is almost impossible to find a job task that requires the use of only one skill, but it is not difficult to find a task that cannot be satisfactorily performed without the possession of a particular skill.

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[1] Displays are not presented for five foundation skills, because insufficient information was available to construct a display: F4-Mathematics; F11-Knowing How to Learn; F12-Reasoning; F14-Self-Esteem; and F17-Integrity/Honesty.

Table 2-1. Definitions of Competencies and Foundation Skills

Competencies

Resources

C1 Allocates Time - Selects relevant, goal-related activities, ranks them in order of importance, allocates time to activities, and understands, prepares, and follows schedules. Competent performance in allocating time includes properly identifying tasks to be completed; ranking tasks in order of importance; developing and following an effective, workable schedule based on accurate estimates of such things as importance of tasks, time to complete tasks, time available for completion, and task deadlines; avoiding wasting time; and accurately evaluating and adjusting a schedule.

C2 Allocates Money - Uses or prepares budgets, including making cost and revenue forecasts, keeps detailed records to track budget performance, and makes appropriate adjustments. Competent performance in allocating money includes accurately preparing and using a budget according to a consistent and orderly accounting method; accurately calculating future budgetary needs based on projected costs and revenues; accurately tracking the extent to which actual costs and revenues differ from the estimated budget, and taking appropriate and effective actions.

C3 Allocates Material and Facility Resources - Acquires, stores, and distributes materials, supplies, parts, equipment, space, or final products in order to make the best use of them. Competent performance in allocating material and facility resources includes carefully planning the steps involved in the acquisition, storage, and distribution of resources; safely and efficiently acquiring, transporting or storing them; maintaining them in good condition; and distributing them to the end user.

C4 Allocates Human Resources - Assesses knowledge and skills and distributes work accordingly, evaluates performance and provides feedback. Competent performance in allocating human resources includes accurately assessing people's knowledge, skills, abilities, and potential; identifying present and future workload; making effective matches between individual talents and workload; and actively monitoring performance and providing feedback.

Information

C5 Acquires and Evaluates Information - Identifies need for data, obtains them from existing sources or creates them, and evaluates their relevance and accuracy. Competently performing the tasks of acquiring data and evaluating information includes posing analytic questions to determine specific information needs; selecting possible information and evaluating its appropriateness; and determining when new information must be created.

C6 Organizes and Maintains Information - Organizes, processes, and maintains written or computerized records and other forms of information in a systematic fashion. Competently performing the tasks of organizing and maintaining information includes understanding and organizing information from computer, visual, oral and physical sources in readily accessible formats, such as computerized data bases, spreadsheets, microfiche, video disks, paper files, etc.; when necessary, transforming data into different formats in order to organize them by the application of various methods such as sorting, classifying, or more formal methods.

C7 Interprets and Communicates Information - Selects and analyzes information and communicates the results to others using oral, written, graphic, pictorial, or multi-media methods. Competently performing the tasks of communicating and interpreting information to others includes determining information to be communicated; identifying the best methods to present information (e.g., overheads, handouts); if necessary, converting to desired format and conveying information to others through a variety of means including oral presentation, written communication, etc.

C8 Uses Computers to Process Information - Employs computers to acquire, organize, analyze, and communicate information. Competently using computers to process information includes entering, modifying, retrieving, storing, and verifying data and other information; choosing format for display (e.g., line graphs, bar graphs, tables, pie charts, narrative); and ensuring the accurate conversion of information into the chosen format.

Interpersonal

C9 Participates as a Member of a Team - Works cooperatively with others and contributes to group with ideas, suggestions, and effort. Demonstrating competence in participating as a member of a team includes doing own share of tasks necessary to complete a project; encouraging team members by listening and responding appropriately to their contributions; building on individual team members' strengths; resolving differences for the benefit of the team; taking personal responsibility for accomplishing goals; and responsibly challenging existing procedures, policies, or authorities.

C10 Teaches Others - Helps others learn. Demonstrating competence in teaching others includes helping others to apply related concepts and theories to tasks through coaching or other means; identifying training needs; conveying job information to allow others to see its applicability and relevance to tasks; and assessing performance and providing constructive feedback/reinforcement.

C11 Serves Clients/Customers - Works and communicates with clients and customers to satisfy their expectations. Demonstrating competence in serving clients and customers includes actively listening to customers to avoid misunderstandings and identifying needs; communicating in a positive manner especially when handling complaints or conflict; efficiently obtaining additional resources to satisfy client needs.

C12 Exercises Leadership - Communicates thoughts, feelings, and ideas to justify a position, encourages, persuades, convinces, or otherwise motivates an individual or groups, including responsibly challenging existing procedures, policies, or authority. Demonstrating competence in exercising leadership includes making positive use of the rules/values followed by others; justifying a position logically and appropriately; establishing credibility through competence and integrity; and taking minority viewpoints into consideration.

C13 Negotiates to Arrive at a Decision - Works toward an agreement that may involve exchanging specific resources or resolving divergent interests. Demonstrating competence in negotiating to arrive at a decision involves researching opposition and the history of the conflict; setting realistic and attainable goals; presenting facts and arguments; listening to and reflecting on what has been said; clarifying problems and resolving conflicts; adjusting quickly to new facts/ideas; proposing and examining possible options; and making reasonable compromises.

C14 Works with Cultural Diversity - Works well with men and women and with a variety of ethnic, social, or educational backgrounds. Demonstrating competence in working with cultural diversity involves understanding one's own culture and those of others and how they differ; respecting the rights of others while helping them make cultural adjustments where necessary; basing impressions on individual performance, not on stereotypes; and understanding concerns of members of other ethnic and gender groups.

Systems

C15 Understands Systems - Knows how social, organizational, and technological systems work and operates effectively within them. Demonstrating competence in understanding systems involves knowing how a system's structures relate to goals; responding to the demands of the system/organization; knowing the right people to ask for information and where to get resources; and functioning within the formal and informal codes of the social/organizational system.

C16 Monitors and Corrects Performance - Distinguishes trends, predicts impact of actions on system operations, diagnoses deviations in the function of a system/organization, and takes necessary action to correct performance. Demonstrating competence in monitoring and correcting performance includes identifying trends and gathering needed information about how the system is intended to function; detecting deviations from system's intended purpose; troubleshooting the system; and making changes to the system to rectify system functioning and to ensure quality of product.

C17 Improves and Designs Systems - Makes suggestions to modify existing systems to improve products or services and develops new or alternative systems. Demonstrating competence in improving or designing systems involves making suggestions for improving the functioning of the system/organization; recommending alternative system designs based on relevant feedback; and responsibly challenging the status quo to benefit the larger system.

Technology

C18 Selects Technology - Judges which set of procedures, tools, or machines, including computers and their programs, will produce the desired results. Demonstrating competence in selecting technology includes determining desired outcomes and applicable constraints; visualizing the necessary methods and applicable technology; evaluating specifications; and judging which machine or tool will produce the desired results.

C19 Applies Technology to Task - Understands the overall intent and the proper procedures for setting up and operating machines, including computers and their programming systems. Demonstrating competence in how to apply technology to task includes understanding how different parts of machines interact and how machines interact with broader production systems; on occasion installing machines including computers; setting up machines or systems of machines efficiently to get desired results; accurately interpreting machine output; and detecting errors from program output.

C20 Maintains and Troubleshoots Technology - Prevents, identifies, or solves problems in machines, computers, and other technologies. Demonstrating competence in maintaining and troubleshooting technology includes identifying, understanding, and performing routine preventative maintenance and service on technology; detecting more serious problems; generating workable solutions to correct deviations; and recognizing when to get additional help.

Foundation Skills

Basic Skills

F1 Reading - Locates, understands, and interprets written information in prose and documents—including manuals, graphs, and schedules—to perform tasks; learns from text by determining the main idea or essential message; identifies relevant details, facts, and specifications; infers or locates the meaning of unknown or technical vocabulary; and judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.

F2 Writing - Communicates thoughts, ideas, information, and messages in writing; records information completely and accurately; composes and creates documents such as letters, directions, manuals, reports, proposals, graphs, flow-charts; uses language, style, organization, and format appropriate to the subject matter, purpose, and audience; includes supporting documentation and attends to level of detail; and checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.

F3 Arithmetic - Performs basic computations; uses basic numerical concepts such as whole numbers and percentages in practical situations; makes reasonable estimates of arithmetic results without a calculator; and uses tables, graphs, diagrams, and charts to obtain or convey quantitative information.

F4 Mathematics - Approaches practical problems by choosing appropriately from a variety of mathematical techniques; uses quantitative data to construct logical explanations for real world situations; expresses mathematical ideas and concepts orally and in writing; and understands the role of chance in the occurrence and prediction of events. (See footnote on page 2-3.)

F5 Listening - Receives, attends to, interprets, and responds to verbal messages and other cues such as body language in ways that are appropriate to the purpose; for example, to comprehend, to learn, to critically evaluate, to appreciate, or to support the speaker.

F6 Speaking - Organizes ideas and communicates oral messages appropriate to listeners and situations; participates in conversation, discussion, and group presentations; selects an appropriate medium for conveying a message; uses verbal language and other cues such as body language appropriate in style, tone, and level of complexity to the audience and the occasion; speaks clearly and communicates a message; understands and responds to listener feedback; and asks questions when needed.

Thinking Skills

F7 Creative Thinking - Uses imagination freely, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.

F8 Decision Making - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.

F9 Problem Solving - Recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be); identifies possible reasons for the discrepancy; devises and implements a plan of action to resolve it; evaluates and monitors progress; and revises plan as indicated by findings.

F10 Seeing Things in the Mind's Eye - Organizes and processes symbols, pictures, graphs, objects or other information; for example, sees a building from a blueprint, a system's operation from schematics, the flow of work activities from narrative descriptions, or the taste of food from reading a recipe.

F11 Knowing How To Learn - Recognizes and can use learning techniques to apply and adapt new knowledge and skills in both familiar and changing situations and is aware of learning tools such as personal learning styles (visual, aural, etc.), formal learning strategies (note taking or clustering items that share some characteristics), and informal learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions). (See footnote on page 2-3.)

F12 Reasoning - Discovers a rule or principle underlying the relationship between two or more objects and applies it in solving a problem; uses logic to draw conclusions from available information; extracts rules or principles from a set of objects or written text; applies rules and principles to a new situation or determines which conclusions are correct when given a set of facts and a set of conclusions. (See footnote on page 2-3.)

Personal Qualities

F13 Responsibility - Exerts a high level of effort and perseverance toward goal attainment; works hard to become excellent at doing tasks by setting high standards, paying attention to details, working well and displaying a high level of concentration even when assigned an unpleasant task; and displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing tasks.

F14 Self-Esteem - Believes in own self-worth and maintains a positive view of self; demonstrates knowledge of own skills and abilities; is aware of impact on others;

and knows own emotional capacity and needs and how to address them. (See footnote on page 2-3.)

F15 Social - Demonstrates understanding, friendliness, adaptability, empathy and politeness in new and on-going group settings; asserts self in familiar and unfamiliar social situations; relates well to others; responds appropriately as the situation requires; and takes an interest in what others say and do.

F16 Self-Management - Assesses own knowledge, skills, and abilities accurately; sets well-defined and realistic personal goals; monitors progress toward goal attainment and motivates self through goal achievement; exhibits self-control and responds to feedback unemotionally and non-defensively; and is a "self-starter."

F17 Integrity/Honesty - Can be trusted; recognizes when faced with making a decision or exhibiting behavior that may break with commonly-held personal or societal values; understands the impact of violating these beliefs and codes on an organization, self, and others; and chooses an ethical course of action. (See footnote on page 2-3.)

Competencies

C1 Allocates Time - Selects relevant, goal-related activities, ranks them in order of importance, allocates time to activities, and understands, prepares, and follows schedules. Competent performance in allocating time includes properly identifying tasks to be completed; ranking tasks in order of importance; developing and following an effective, workable schedule based on accurate estimates of such things as importance of tasks, time to complete tasks, time available for completion, and task deadlines; avoiding wasting time; and accurately evaluating and adjusting a schedule.

HIGHER

Blue Collar Worker Supervisor: *Review and schedule orders for production within a specified time frame*—receives copies of order requests daily; evaluates orders to determine priority requirements; checks inventory to ensure that the raw material to fill standard and custom orders is available; orders raw materials, if necessary; schedules job/order for production; and satisfies the requirements of manufacturing and filling various product orders to meet customer deadlines. Task ID#: 8011521.	***Accounting/Financial Analyst:*** *Determine the order in which to conduct an audit so as to stay within the company's time and budget constraints for the audit*—obtains the work program (which details the steps to be performed in auditing the balance) from his or her supervisor; reads the work program to obtain a general idea of the steps; decides which steps are the most important and should have priority; contacts clients to determine their schedules and availability; prioritizes steps based on client availability and step importance; lists steps in order of priority; conducts them in that order; and adjusts step order as necessary to stay within deadlines. Task ID#: 8011721	***Programming Technician:*** *Finish writing a computer program in a specified time*—estimates the amount of time required to write a computer program; breaks down the program writing task into major components; estimates the time required to complete each component; develops a timeline (a graphic aid to display actual progress and initial deadlines); identifies problem areas and areas that went better than expected; and shifts attention to problem areas. Task ID#: 8011821
Hotel Account Executive/Sales Executive: *Pre-plan weekly activities*—makes appointments with potential customers; prioritizes customers in order of perceived importance, using "prime time" slots for more important clients; completes paperwork and computer work in non- prime time hours; and maintains a flexible schedule which is easily adjusted to accommodate telephone calls in different time zones, etc. Task ID#: 8011081	***Traffic, Shipping and Receiving Clerk:*** *Prepare a schedule to unload trucks*—receives a call from the terminal manager specifying which delivery trucks to expect. Following this notification, the clerk prepares a daily schedule for truck deliveries; estimates the number of workers required to unload the trucks; makes schedule changes to accommodate truck delivery cancellations or truck breakdowns; and ensures that specified required deliveries are worked into the schedule. Task ID#: 8011321	***Licensed Practical Nurse:*** *Plan daily schedule according to received assignments*—receives a report of the number of patients he or she will be responsible for during the day; plans the order of patient visits according to the LPN's time frames and activities for the day; allows time for each patient according to the care needed, and for performance of needed paperwork. Task ID#: 8011771

Travel Agent: *Prioritize work tasks on a daily basis to ensure the completion of travel arrangements in a timely manner*—reviews the work task list at the end of each day; records tasks to be completed the next day on the calendar; prioritizes work tasks by importance each day; and completes ticketing and lodging reservations to meet scheduled deadlines for client. Task ID#: 8011511	***Optician:*** *Prioritize tasks and set deadlines for their completion*— meets with his or her supervisor at the beginning of the work week to discuss the schedule; reviews customer orders to determine if the orders are on time or require follow up tracking; completes eyeglass lens orders and calls in or sends orders each day to expedite completion; and prioritizes schedule in order to accomplish most important and/or overdue work first. Task ID#: 8012051	***Quality Control Inspector:*** *Establish a system for inspecting elevators within a given area and time frame while dealing with other contingencies*— organizes required inspections based on their due dates and establishes a geographical route which facilitates completion. Task ID#: 8011811
Customer Service Representative: *Schedule appointments at intervals sufficient to give enough time to deal with each customer*—lists the customer on the itinerary and estimates the time needed for each customer. Using these estimates as a guide, the representative then sets up appointments with customers. Task ID#: 8012131	***Waiter/Waitress:*** *Complete side work (on-going general tasks such as filling water pitchers)*—realizes the side work needs to be checked on and completed; services all tables to allow for time to do side work; completes the side work quickly and efficiently; and returns promptly to service station tables. Task ID#: 8012091	***Computer Operator:*** *Allocate time to ensure timely delivery of output*—checks the priority code on a daily basis, sets the printer according to the priority codes, monitors the flow of codes and job operation, clears printers according to time set, and breaks and distributes reports. Task ID#: 8011441.
Childcare Aide: *Available at any time for the children's needs*—on time every morning to watch the children; runs each activity or project on time, and is flexible if the activity is running late. Task ID#: 8012141.		

LOWER

C2 Allocates Money - Uses or prepares budgets, including making cost and revenue forecasts, keeps detailed records to track budget performance, and makes appropriate adjustments. Competent performance in allocating money includes accurately preparing and using a budget according to a consistent and orderly accounting method; accurately calculating future budgetary needs based on projected costs and revenues; accurately tracking the extent to which actual costs and revenues differ from the estimated budget, and taking appropriate and effective actions.

HIGHER

***Food Service Manager:** Plan the forecast for the following fiscal year, for example in a college setting—* uses preliminary enrollment figures to forecast the number of students who will be enrolled in the college for the forthcoming year. Next, the manager decides what type of labor is necessary to service the forecasted number of students, how much money is available for food, and what kind of food can be purchased with the money. The manager also determines what percent of the budget will be allocated for direct costs, such as paper products, cleaning supplies, linens, and telephone bills. All of these decisions must be made in a way that ensures that the yearly profit margin will be met. Finally, the manager speaks with organization representatives to gain acceptance of the yearly forecast. Task ID#: 8021231	***Construction Contractor:** Ensure that the construction project is completed within the estimated budget*—determines the project costs based on contract requirements; calculates the work to be performed; breaks out each element of cost (technology, equipment, materials, personnel); and assigns each element a unit estimated cost. Monitoring the results on a timely basis, the contractor analyzes the results to project future unit costs. Task ID#: 8022231	***Accounting/Financial Analyst:** Develop a budget for the upcoming fiscal year*—reviews the actual expenditures of the current year on a spreadsheet; projects the current figures into the next year while adjusting for expected changes (e.g., new equipment, new customers); determines if the "bottom line" is within an acceptable range; adjusts details to manipulate the bottom line accordingly; distributes the budget to specific departments; and tracks variances between actual and budgeted amounts during the year. Task ID#: 8021841
***Dietary Manager:** Monitor money for supplies from the framework of a fixed budget and adjust the budgetary plan so that it corresponds with fluctuating food prices*— monitors purchasing records; allocates money to the units under his or her supervision according to need; and checks with a minimum of three vendors on prices of the items to be purchased. The dietary manager also receives any reports of equipment loss, damage, breakdowns, and abuse and factors these reports into purchase decisions. Finally, the manager readjusts the menu content and the list of menu items to be purchased based upon the obtained information. Task ID#: 8021031	***Medical Records Technician:** Develop a departmental budget*—estimates the resources, supplies, and people needed for the coming year. This means that the cost of resources, supplies and salaries must be estimated. This forecast must be justified in writing. Then the records technician must make adjustments to the budget according to management approval. The last step is to monitor current expenses and resources. Task ID#: 020041	***Dietary Manager:** Compile and interpret budget data to monitor performance and forecast budgetary needs*—gathers data on expenditures; summarizes the data in concise form; interprets the data and compares them with data from the previous year to enable forecasting of future expenditures; and communicates results to upper management and to staff and recommends adjustments needed to achieve a balanced budget. Task ID#: 8021861

Chef: *Prepare weekly sales projections*—conducts an initial inventory of food supplies (and completes the full inventory later). He or she determines how much food was bought and from this calculates the costs of purchased and on-hand food. Next, the chef determines sales with an income estimate sheet. Task ID#: 020411	***Chef:*** *Order/buy pork loins and estimate the number of portions that can be sold at particular prices*—checks the price of the item with the suppliers and then orders accordingly. Once received, the chef weighs, cleans, cooks, and portions the pork loins. He or she calculates the price of each portion, and prices the side dishes which complement the pork. Task ID#: 020591	***Chef:*** *Perform a cost analysis on menu items in order to turn a profit*—conducts market research, such as calling purveyors and searching for the freshest meat. He or she also assesses labor and ingredient costs, taking into account the cost of garnishes and cooking weight loss. Task ID#: 020421
Beauty Shop Owner: *Determine cash on hand to establish what is available for such items as supplies and advertising*—balances the checkbook at the end of the week; determines the following week's expenses; and allocates available funds for various purposes. Task ID#: 8021791	***Beauty Shop Owner:*** *Maintain balanced daily sales sheets*—designs a user friendly day sheet, trains the receptionist to balance the day sheet, oversees and regularly verifies the sheet, crosschecks charges and checks to insure their validity, and maintains a list of funds borrowed from the drawer by staff. Task ID#: 8021361	
Secretary: *Prepare funding profiles on research proposals*—retrieves relevant data (e.g., name of the researcher, proposed amount of funds requested); retrieves the funding profile template from the computer; fills in the necessary information on the computer template concerning required funds (i.e., the monetary information is transferred from the proposal to the computer); prints document from the computer and gives it to the manager for verification of figures and his/her signature. Task ID#: 020191.		

LOWER

C3 Allocates Material and Facility Resources - Acquires, stores, and distributes materials, supplies, parts, equipment, space, or final products in order to make the best use of them. Competent performance in allocating material and facility resources includes carefully planning the steps involved in the acquisition, storage, and distribution of resources; safely and efficiently acquiring, transporting or storing them; maintaining them in good condition; and distributing them to the end user.

HIGHER

***Electrician:** Project material requests for a construction site*—reviews the two-week and long-term construction schedules and projects material requirements for the following month. The electrician next inventories the current material and compares it with the material requested; from this comparison a list of required material is developed. The electrician then reviews lists of assigned stock, develops a purchase list of additional material required, reviews projected manpower, reviews support material requests, and orders additional support equipment. Task ID#: 030471	***Construction Contractor:** Allocate and deploy equipment for a construction project*—recognizes the importance of project planning; plans the equipment allocation; establishes a construction schedule and timetable; coordinates equipment resources with the schedule; and obtains or purchases appropriate equipment for the project. The contractor implements, monitors, and improves the equipment allocation plan on a periodic basis. Task ID#: 8032241	***Hotel Account Executive/Sales Executive:** Assign meeting and sleeping rooms*—contacts the group leader to determine the size of the group and ascertains availability of accommodations; determines the need for additional services, such as food, refreshments, lecterns, and audio-visual equipment; makes sure that the correct number of sleeping and meeting rooms are reserved and set up as required for incoming group; and arranges for transportation, if needed, from airport or corporate offices. Task ID#: 8031731
***Medical Records Technician:** Manage the space needed for the retention of records*—assesses the need for additional space for medical records storage. Next, the records technician assesses the space which is available. The records technician then looks at the length of record retention, based on regulations and on amount of usage. This information, along with budget constraints, is then used to assess options. These options might include microfilm, optical, and off-site records storage. The medical records technician finally monitors the results of the management's decision. Task ID#: 030041	***Electrician:** Forecast labor and material needed for a job in order to estimate cost*—looks at the job requirements and conveys his or her comments to the general contractor's office. Upon receipt of a reply, the electrician incorporates changes into the construction schedule, developing a list of any materials needed. Finally, the electrician identifies and orders the long lead items (those that have a longer acquisition period). Task ID#: 020471	***Truck Delivery Salesperson/Outside Sales:** Control the inventory levels of products on the truck to maximize cash flow (e.g., keep appropriate amount of fast selling items on the truck)*—determines which slow moving items may be needed occasionally and which specialty items should be kept on the truck for periodic sales; sends items that do not sell back to the company; determines the highest selling items; and decides how many of each high selling item to carry on the truck as inventory. Task ID#: 8031831

***Travel Agent:** Acquire and store travel materials, such as brochures, catalogs, and forms, for subsequent distribution to customers*—creates/establishes a filing system for travel materials; labels files; orders materials from travel service providers, such as tourist information centers, airlines, hotels, and rental car agencies; files travel materials according to a pre-established system; and retrieves materials from the file as needed and distributes them to customers. Task ID#: 8031881	***Chef:** Manage the execution of the food preparation and storage*—cleans the portions of meat and fish and stores the food in the appropriate places. The chef documents the number of portions placed in storage and the number of portions removed from storage. Finally, the chef calculates the cost of each portion in storage before each is sold. Task ID#: 030591	***Medical Assistant:** Acquire, maintain, and track supplies on hand*—inventories supplies and equipment and mentally tracks their use, observes stock visually each time stationery is removed to track the amount needed. He then either fills out forms to reorder supplies or telephones a supplier. The assistant also checks stock when a salesperson visits the office, giving the salesperson a written or verbal order and obtains extra supplies when specific merchandise is on sale. Task ID#: 8031541
***Retail Sales Clerk:** Maintain the equipment used for tagging and for keeping the merchandise in order*—makes sure that there are adequate supplies necessary for the maintenance of the merchandise. This means that the sales clerk makes sure that there are security tags for the merchandise, polish to keep shoes ready for the customers, clearance tags, shoe size tags, staples, and try-on socks. Task ID#: 030151	***Computer Operator:** Ensure that the inventory has been updated*—reviews the list of required supplies and takes the steps necessary to obtain them, including obtaining supervisory approval and writing a requisition. Task ID#: 8031041.	***Waiter/Waitress:** Prepare oneself and one's station for the shift*—makes sure that his or her uniform meets the restaurant's standards; ensures that materials for the shift are on hand; identifies and sets up his or her station; completes side jobs (on-going general tasks, e.g., brews coffee, fills water pitchers); and memorizes specials for the day. Task ID#: 8031981
***Assistant Housekeeper:** Distribute amenities to the rooms*—picks up shampoo and soap in baskets. Next, he or she puts the amenities in the rooms. Also, he or she puts paper, envelopes, and postcards in the rooms. Task ID#: 030251	***Truck Driver:** Stock the truck with supplies necessary for pick-ups and deliveries*—loads the truck with customer supplies (e.g., overnight letters, courier envelopes, air bills). The truck driver stacks the supplies in an orderly, systematic manner. Task ID#: 030401	***Assistant Housekeeper:** Keep inventory of linens*—goes to the closets on all floors and counts the number of clean linens in them. The assistant housekeeper then counts the number of clean linens downstairs. With this information, the assistant housekeeper determines the number of linens which are dirty and which therefore need to be sent to the laundry service. Then the assistant housekeeper gives these figures to the executive housekeeper to see what is on order and what is in stock. Task ID#: 030131

LOWER

C4 Allocates Human Resources - Assesses knowledge and skills and distributes work accordingly, evaluates performance and provides feedback. Competent performance in allocating human resources includes accurately assessing peoples' knowledge, skills, abilities, and potential; identifying present and future workload; making effective matches between individual talents and workload; and actively monitoring performance and providing feedback.

HIGHER

Electrician: *Schedule work assignments for other electricians*—reviews all installation tasks to determine personnel scheduling. He or she then lists tasks in order of priority, matches tasks with personnel for given periods of time, and assigns tasks to individuals. The electrician then supervises workers' performance and provides feedback. Finally, the electrician coordinates with subcontractors for follow-on work. Task ID#: 040321	***Dietary Manager:*** *Distribute the workload and evaluate the performance of the staff*—ascertains whether an individual worker's difficulty is work related or a result of personal problems. Further, the manager schedules work assignments to ensure that all tasks are covered and creates contingency plans to deal with the absence of several workers from a particular unit. Employees are cross trained so that they can be shifted as the workload changes. Every six months, the manager reviews the work performance of the subordinate in light of the goals and work expectations set during prior review. The manager provides staff with positive feedback and constructive criticism. Task ID#: 8041311	***Construction Contractor:*** *Delegate responsibility to staff*—reviews the qualifications of available personnel, selects and assigns staff to job responsibilities, and provides the necessary resources to allow staff to perform tasks. Monitoring and evaluating workers' performance, the contractor provides guidance, provides feedback to improve worker performance, and, where appropriate, provides workers with training and education. Task ID#: 8042211
Medical Records Technician: *Assign the staffing to the Medical Records Department*—determines the productivity level of the current staff; determines the amount of workload, for example, the number of records to be filled; develops the quality and quantity standards of the workload; determines how long it takes to perform a function; hires staff to meet the established standards. Task ID#: 040041.	***Blue Collar Worker Supervisor:*** *Oversee a specified work crew*—supervises a large and diverse work crew, schedules and assigns the workers according to their abilities. Task ID#: 8041341.	

	Chef: ***Hire qualified staff members who complement each others strengths and weaknesses***—interviews prospective employee and reads his or her resume to decide if necessary qualifications are met. The chef then tries out a prospective employee on a provisional basis for a week to assess his or her expertise, and monitors the new staff member's performance. Task ID#: 040421	***Assistant Housekeeper:*** ***Place employees in productive working groups when scheduling them for work***—determines who is available to work and when, and then pairs the inexperienced workers with the more experienced workers. The next step is to put the appropriate employees in work time slots. If there were employees who were not present when assignments were made, the assistant housekeeper logs their names in so that the room attendant will know who is scheduled to work with whom. Task ID#: 040131	***Beauty Shop Owner:*** ***Allocate specific staff to particular customers based upon a perceived match***—assesses and understands the personality and technical skills of individual staff members; uses this information to match clients who want other services with stylists who have complementary personalities and appropriate technical skills. Task ID#: 8041101.
LOWER			

C5 Acquires and Evaluates Information - Identifies need for data, obtains them from existing sources or creates them, and evaluates their relevance and accuracy. Competently performing the tasks of acquiring data and evaluating information includes analytic questions to determine specific information needs; selecting possible information and evaluating its appropriateness; and determining when new information must be created.

HIGHER

Dietary Manager: *Gather quality assurance data to evaluate effectiveness of the dietitian staff in meeting patient nutritional needs*—develops quality assurance indicators and compares them to industry standards. The manager develops data collection forms, reviews patient charts to extract relevant data, and tabulates results. The manager also evaluates the results, compares them with industry standards, discusses the results with staff dietitians, and identifies deficiency areas. Where there is a deficiency, the manager assists the dietitian in developing a plan to correct it, implements the plan, and records it in a policy and procedure draft. The dietary manager conducts follow up consultations with the dietitian to evaluate the results of policy implementation. Task ID#: 8051461	***Blue Collar Worker Supervisor:*** *Acquire data to justify a cost improvement project*—implements a process change to determine the effect on yield; identifies improvement, such as yield, on a particular process; retrieves documentation or information that details yield data; evaluates data to determine trends, such as improvement in yield; prepares documentation that details the cost improvement process; submits documentation for approval; and prepares/revises batch records. Task ID#: 8051911	***Accounting/Financial Analyst:*** *Conduct a financial audit of a government contractor to determine the contractor's compliance with government regulations*—obtains a list of the client's contracts and financial information; conducts an analysis to determine which contracts will cover the largest percentage of the client's work; selects contracts to be reviewed; obtains selected contracts from the client; reads contracts to determine areas relevant to compliance; compares financial information with the contract; chooses areas of non-compliance based on reading and comparison; and writes a summary of conclusions. Task ID#: 80511721
Law Enforcement Officer: *Obtain the needed information for an incident report*—communicates with the witness(es) of an incident to understand the situation clearly. The officer asks specific questions to make sure that all necessary details are obtained. The officer evaluates the importance of the obtained information and decides what information will be recorded in the report. Task ID#: 8051061	***Outside Equipment Technician:*** *Identify a problem by acquiring and evaluating the information available*—examines the trouble order, goes to the line where the problem is being experienced, and tests the line to gain information about what the problem might be. The technician evaluates the information from the tests and determines the most likely source of the problem. Task ID#: 8051431	***Programming Technician:*** *Acquire input from the user to implement a new system*—prepares and distributes a table layout of the old system; sends out requests to users for table analysis reports; reviews responses from users; verifies the findings by scanning the source code of the current system; discusses the findings with the users and the applications programmers; evaluates the validity of the findings; and publishes the results for final approval. Task ID#: 8052001

	Telemarketing Representative: *Obtain relevant information from customers*—obtains need or service-related information from customers; accesses and obtains a computer-generated profile of customer information; and evaluates the accuracy of the information and the extent to which it is relevant. Task ID#: 8052321.	***Hairstylist/Cosmetologist:*** *Take steps to keep abreast of new and emerging styles and techniques*—subscribes to a variety of hairstyling and cosmetology magazines, including domestic and international magazines; reads magazine articles and notes pictures of new and emerging hairstyles; attends fashion shows and makeup conferences sponsored by leading manufacturers; takes notes on interesting products and on new hair cutting techniques to share with customers; orders videotapes on new coiffures to learn new styles and cutting techniques; evaluates the information gathered from magazines, meetings, conferences, and videotapes; draws conclusions about the information; and incorporates valued information into daily task performance. Task ID#: 8052161	
	Dental Hygienist: *Examine the patients and communicate results to the doctor*—determines the reasons for the patient's visit and examines the patient's teeth and gums to evaluate their condition. Task ID#: 8051671.	***Carpenter:*** *Gather the information needed to commence customer repairs*—responds to a repair call from a customer by determining the nature of the problem from the customer and investigating the problem further to gather supplementary data. Task ID#: 8051301	***Dietary Manager:*** *Obtain and act upon inventory information*—tracks the usage of food, detergent, and small kitchen items through periodic inventory status reports. The manager also explores the reasons behind any large monthly expenditures. Task ID#: 8051031
LOWER	***Plastic Molding Machine Operator:*** *Maintain daily records of the plastic molding machine's functioning*—records an hourly feed rate of grams per hour on the feed rate form. He or she also checks dials and gauges and records the number of dirt preventing screens left at the end of each work shift. Finally, the operator notifies the supervisor of any machine-related problems. Task ID#: 8051281	***Traffic, Shipping and Receiving Clerk:*** *Obtain all necessary paperwork regarding the shipment or receipt of parts and materials and review the information prior to taking any action*—removes the packing slip from the accompanying crate or carton; reviews the relevance and accuracy of information on the slip; obtains shipping request form from the accounting department and material to be shipped from the shipper; and checks information on the form against the material to be shipped to determine if all relevant information is accurate (e.g., quantity, size, marking). Task ID#: 8051531	

C6 Organizes and Maintains Information - Organizes, processes, and maintains written or computerized records and other forms of information in a systematic fashion. Competently performing the tasks of organizing and maintaining information includes understanding and organizing information from computer, visual, oral and physical sources in readily accessible formats, such as computerized data bases, spreadsheets, microfiche, video disks, paper files, etc.; when necessary, transforming data into different formats in order to organize them by the application of various methods such as sorting, classifying, or more formal methods.

HIGHER	***Programming Technician:*** *Maintain customer files*—sets up a file for every site (file labels, space for file, etc.); determines what information is to be maintained in each file; sets up a system among systems engineers to update files (i.e., circulate milestone charts for systems engineers to update the status of projects); sets up future planning for sites (i.e., additional training needs); locates a storage place for files; and designs a method for retrieving information that can be used by those not familiar with the system. Task ID#: 8061851	***Construction Contractor:*** *Organize and maintain the information needed to administer a construction project*—plans the kinds of information required to administer and track construction project costs, materials, equipment, and time. Breaking down information categories into basic elements, the contractor coordinates the elements with the overall project. The individual develops a record maintenance system to capture and retain the information, and constantly updates the information as it is collected. Task ID#: 8062241	
	Truck Delivery Salesperson/Outside Sales: *Conduct business transactions on the computer*—generates sales receipts for the customer, showing price, balance owed, and payment method; relays pricing information by keying in the stock number; keeps relevant personal data on the customer (e.g., SSN, telephone number, home address); monitors the inventory level, orders needed stock; and generates financial statements showing collections, sales, receivables, balance, inventory balance, cash sales, open accounts, revolving sales, extended credit, taxable items, etc. Task ID#: 8061831	***Quality Control Inspector:*** *Complete case file information*—gathers and completes all required documents; extrapolates information from field notes and puts it into the appropriate places on the forms; relates the obtained information to the photographs which were taken; completes the case file; and organizes the on-file information for effective use in legal obligations, information maintenance, and presentations to officials. Task ID#: 8061801	***Food Service Manager:*** *Maintain employees' records as well as daily cash receipts*—keeps records of employees' attendance and performance, and updates and evaluates these data periodically. He or she maintains a record of daily cash receipts, record of vendors' invoices and food prices, a stock list of food and beverage items, and an updated record of important telephone numbers, such as vendors' and employees' telephone numbers. Task ID#: 8062151

	Blue Collar Worker Supervisor: *Record and maintain purchase requests, purchase invoices, and cost information of raw materials—*prepares the purchase request or telephones the vendor to request material and records order information. The supervisor also receives material and invoice; verifies product received is product ordered; verifies that price quoted matches the bill; records the price paid for the product in the log book; and maintains inventory records of all materials received and used. Task ID#: 8061521	***Childcare Aide:*** *Compile accurate written records, including accounts of all facets of the child's day, for the office and the parents—*records feeding times, including how much and what was fed to the child; records naps taken by the child, noting start and finish times of naps; administers medication and notes dosage, time, and date, and signs appropriate form; compiles a list of supplies needed by the child and gives this list to the parent when the parent picks up the child; and keeps general notes and evaluations of the child's day to relate to parents. Task ID#: 8061661	***Beauty Shop Owner:*** *Maintain a record of inventory, including product sales, in order to evaluate a given product line—*puts product information into the personal computer and obtains a printout of a given product line, including a breakdown of the amount of the product that has been sold. This printout breaks down data in a variety of ways, including by gender of buyer, etc. The owner uses this information to make decisions on product purchases. Task ID#: 8061101
	Truck Delivery Salesperson/Outside Sales: *Maintain proper inventory in the freezer and truck—*checks the incoming load to determine congruence with the load sheet; checks the merchandise being delivered to customers; takes inventory at the end of the week in both the truck and the freezer; and reconciles all records with each other. Task ID#: 8061401	***Beauty Shop Owner:*** *Organize incoming information about different products—*receives information about a given product (e.g., directions for use, contents, and material safety data sheet [MSDS]) and organizes it so that the appropriate information is provided to employees. The owner allows employees to decide which information to pass to the clients. The owner also maintains and ensures easy access to the products' MSDS's. These forms need to be accessed if a client has an adverse reaction to a product. Task ID#: 8061421	***Hotel Account Executive/Sales Executive:*** *Maintain, update, and create files for each event and client—*starts a file for each event by listing the name of the client on a file folder; documents the details of the event on paper (including date, time, type food, etc.); places the information into the appropriate file folder; updates the file folder with additional information, such as the signed contract; and places the file folders into the file cabinet in alphabetical order. Task ID#: 8061971
LOWER	***Order Filler:*** *Turn in "wait" tickets (i.e., tickets for merchandise that is now out-of-stock) at the end of a specified period—*realizes that the bin is empty; keeps ticket, rather than discarding it; and deposits it in a specified box; and carries out the correct steps to turn in wait ticket at the end of the period. Task ID#: 8061641	***Dental Hygienist:*** *Organize, update, and maintain patients' medical records and information in a readily accessible format—*keeps the patients' medical files in alphabetical format for easy access, and updates the rolodex containing the patients' addresses and telephone numbers as information becomes available. Task ID#: 8062171	***Beauty Shop Owner:*** *Keep track of a variety of business affairs using a planning book—*receives an item requiring entry, such as an invoice to be paid, a magazine subscription, a bill for taxes, or notice to call a customer. The owner then records the item in the planning book for the appropriate day; and responds to items for that day. Task ID#: 8061791

C7 Interprets and Communicates Information - Selects and analyzes information and communicates the results to others using oral, written, graphic, pictorial, or multi-media methods. Competently performing the tasks of communicating and interpreting information to others includes determining information to be communicated; identifying the best methods to present information (e.g., overheads, handouts); if necessary, converting to desired format and conveying information to others through a variety of means including oral presentation, written communication, etc.

HIGHER

Expeditor/Purchasing Agent: *Make presentations and generate reports to management regarding such topics as status of work activities and an analysis of leasing versus purchasing options*—researches a project topic, gathers pertinent data in order to have a comprehensive understanding of the material, and organizes the obtained data in order to resolve the problem. The expeditor then assimilates information for the presentation in a clear and concise manner, including summarizing technical information as issues for management/business levels. Next, the expeditor writes a report of the topic, organizing ideas in a logical and understandable manner. Finally, he or she gives an oral presentation of the materials, effectively using visual aids and graphics when appropriate, and responds to questions. Task ID#: 8071261	***Graphic Designer:*** *Analyze customer information and communicate ideas through graphic or pictorial methods*—reviews customer information and determines the best methods for meeting the customer's needs; identifies the best method for presenting the information; completes a rough draft of the ideas; discusses the idea interpretation with the customer (using rough draft sketches); makes revisions, incorporating customer's feedback; and prepares final sketches. Task ID#: 8072041	***Industry Training Specialist:*** *Develop and conduct training program*—receives an assignment to develop a training program; prepares a training outline; compiles selected information on the training topic; develops training materials, such as training manuals and visual aids; conducts a training session on the specific topic; tests trainees to assess the effectiveness of training; and provides follow up training. Task ID#: 7071891
Telemarketing Representative: *Prepare a proposal for a customer*—collects records of the customer's past telephone bills; writes a proposal comparing the competitor's past bills with an estimated cost for the same services from the representative's company to illustrate the benefits of changing service; graphs the information in order to visually display the communications company's potential offerings and orally presents the results of this research to the customer; and sends written documentation of the research to the customer. Task ID#: 8072331	***Outside Equipment Technician:*** *Interpret information about a customer problem and communicate it to both the customer and the repair group*—listens to a customer to receive information about a product or service complaint; contacts and gathers information from the communications company technician who has done the initial troubleshooting; interprets the information; and communicates it to the customer and the assigned repair group for use in completing the repair work. Task ID#: 8071371	***Law Enforcement Officer:*** *Gather and use information to write a homicide report*—receives and acknowledges a call from the dispatcher. The officer responds to the call and, upon arrival, takes control and secures the crime scene. The officer analyzes the situation to identify danger, potential witnesses and evidence; calls the evidence team; and interviews personnel who are on the scene at the time. Finally, the officer uses this information to write a report of the situation. Task ID#: 8071131

Dental Hygienist: *Communicate information about the patient's condition to doctors, patients, family members, and insurance companies*—checks the patient and his or her dental charts and health records to determine the patient's overall condition; communicates to a doctor information found during teeth cleaning; reads radiograms after they are developed to assist in determining patients' needs; completes insurance forms when requested by the patient; and communicates information to the patient and family members. Task ID#: 8071671	***Computer Operator:*** *Make entries into the operator's log to communicate the day's activities and problems*—determines the existence of problems by interpreting readouts located on the computer's monitor screen. The operator documents the nature of the problem in a log, accurately describing the details involved. Further, the operator communicates the problem to the user. Task ID#: 8071221	***Quality Control Inspector:*** *Communicate results of an inspection to the owner*—performs an inspection; uses the code to show the owner the nature of the apparent violation; explains the various facets of the code and of the violation to the owner; and answers any questions which arise. Task ID#: 8071811
Order Filler: *Communicate a down time situation to co-workers, and explain the situation so that everyone can understand it*—diagnoses and evaluates the problem; determines its importance and who will be affected and who will suffer the most; decides whom to contact for assistance; decides on an alternative plan; and implements it. Task ID#: 8071651	***Hairstylist/Cosmetologist:*** *Read and interpret information about beauty products and techniques, and communicate this information to other operators and customers*—gains information about new products or techniques; decides, based on knowledge of cosmetology and clientele, which products would be best suited for particular procedures; communicates information about products and techniques to other operators and customers; and notifies a manufacturer or trade publication about customers' reactions to a product or technique. Task ID#: 8071581	***Telemarketing Representative:*** *Communicate product information to a potential customer*—knows the details surrounding the product being sold and knows how to explain the details to customers. He or she effectively communicates product information by listening to the customer, being aware of relevant customer cues, and deciding what language to use and how detailed to be when responding to questions. Task ID#: 8071611
Plastic Molding Machine Operator: *Communicate to the supervisor that the machine's process is not operating correctly*—recognizes a problem with how the injection molding process is running and alerts the supervisor about the problem. Task ID#: 8071391	***Excavating Equipment Operator:*** *Use verbal and non-verbal means of communication to communicate with other workers in order to promote safety and production*—uses hand signals to direct the positioning of hauling equipment, and uses two-way radios to communicate with other workers when line-of-sight or noise prevent verbal communication or the use of hand signals. The operator reports equipment malfunctions, orders maintenance, and reports job progress to the supervisor. Task ID#: 8072261	***Optician:*** *Read an eye doctor's prescription for lenses or contacts and transfer information from the prescription form to an order form to be referred by telephone or mail to the optical lab*—studies the doctor's lens prescription form taken from the eye exam; transfers information from the prescription form to an order form; calls in the order form information to the optical lab each day; and mails the order form to the optical lab on days when the lab is closed. Task ID#: 8072051

LOWER

C8 Uses Computers to Process Information - Employs computers to acquire, organize, analyze, and communicate information. Competently using computers to process information includes entering, modifying, retrieving, storing, and verifying data and other information; choosing format for display (e.g., line graphs, bar graphs, tables, pie charts, narrative); and ensuring the accurate conversion of information into the chosen format.

HIGHER	***Programming Technician:*** *Use a computer to resolve an application malfunction*—logs onto the mainframe computer to determine the problem; retrieves the necessary information to identify the problem; transmits data from various computer systems to help with identification; arrives at a solution; transmits corrective software back to the production system; and monitors the new application to verify the solution. Task ID#: 8081991	***Graphic Designer:*** *Create and present solutions for design problems*—enters the relevant design information into the computer, using desktop publishing software and/or computer-assisted design. The designer then creates a design to meet the needs of the client. The design ideas generated are presented to the client for feedback and approval. After receiving feedback, the designer refines the design and presents the finished product to the client. Task ID#: 8081201	
	Accounting/Financial Analyst: *Maintain fixed asset records using a mainframe computer program*—enters data (price, location, department) regarding an asset purchase into a menu-driven database; runs a program module to calculate the monthly depreciation; runs a program module to allocate the depreciation amount to the appropriate department; checks totals of the fixed asset listings against those for the previous month; and runs programs to produce reports upon specific request (e.g., department inventory). Task ID#: 8081841	***Construction Contractor:*** *Prepare a project estimate, a construction schedule, materials requisitions, and job status and progress reports*—turns on the computer and selects appropriate automated data processing (ADP) software. The contractor acquires the appropriate support data and enters it into the programs, makes decisions and inputs the results, interprets data results, and makes changes to improve performance. Task ID#: 8082211	***Computer Operator:*** *Enter information into the mainframe computer as directed by systems analysts and programmers*—evaluates the job to determine the most effective method of processing; initiates a test run to check on the program and setup; makes changes in the program to facilitate the job run; and monitors the run periodically to make sure it is running as programmed. Task ID#: 8081741

Travel Agent: *Use the on-line computer terminal to retrieve information relating to the customer's request, plan the itinerary, and book the airline ticket*—discusses travel plans (destination, travel dates, accommodations) with the customer; retrieves pertinent information on the on-line computer terminal; plans or describes the information to the customer; books the airline ticket and hotel accommodation if the customer is satisfied with the itinerary; and prints out the ticket and itinerary. Task ID#: 8082201	***Accounting/Financial Analyst:*** *Prepare the monthly debt schedule*—reviews financial statements from the division to see if anything is outstanding; enters debts in the appropriate place in the spreadsheet and obtains the organization's portion of the debt ledger; enters appropriate information from the previous year's debt schedule into the monthly schedule; prints the spreadsheet; verifies entries through hand recalculation; and makes changes in the spreadsheet if necessary. Task ID#: 8081711	***Expeditor/Purchasing Agent:*** *Access the computer to retrieve required forms used to request bids and to place purchase orders*—inputs the code to access the personal account file in order to determine bid requests that need to be completed; checks the file listing to determine who the qualified suppliers are; checks quotes in the computer and retrieves data on potential suppliers; retrieves the purchase order form and issues the purchase order; and enters appropriate codes and special conditions into the computer according to the prearranged format. Task ID#: 8081681
Expeditor/Purchasing Agent: *Use the computer to obtain monthly and yearly inventory usage rates*—keys in specified commands to bring up the computer system; picks "stock status" from menu; observes the screen; writes down inventory problems; and deals with these problems accordingly. Task ID#: 8082111	***Traffic, Shipping and Receiving Clerk:*** *Enter merchandise receiving data into the computer terminal*—counts and verifies the shipped order; enters necessary order data into the computer terminal; and uses the computer to retrieve and verify data and to enter corrections, such as numbers, style, or locations. Task ID#: 8081321	***Licensed Practical Nurse*** *Obtain information relevant to the medical condition and/or treatment of a patient*—inputs patient's ID number; uses the probe to select the relevant patient and desired information; enters request for lab results (using the probe); acquires test results; makes copies of the materials and places printouts on the appropriate patient's chart. Task ID#: 8081781
Traffic, Shipping and Receiving Clerk: *Input incoming product data*—receives data on incoming goods and materials. The clerk uses a Cathode Ray Terminal (CRT) to input this data to match the information found in the purchasing order. Task ID#: 8081291	***Waiter/Waitress:*** *Use the computer to process a food order*—receives an order from the customers and proceeds to the computer; enters into the computer the code number, the number of the table, and the number of people; enters the order into the computer (each dish has its own key on the computer); and pushes SEND to process the order to the kitchen. Task ID#: 8081981	***Telemarketing Representative:*** *Input customer information into the computer*—uses the keyboard to input changes of address, zip code, or customer name and inputs the correct disposition code (symbolizing the customer's status with regard to the sale). Task ID#: 8081601

LOWER

C9 Participates as a Member of a Team - Works cooperatively with others and contributes to group with ideas, suggestions, and effort. Demonstrating competence in participating as a member of a team includes doing own share of tasks necessary to complete a project; encouraging team members by listening and responding appropriately to their contributions; building on individual team members' strengths; resolving differences for the benefit of the team; taking personal responsibility for accomplishing goals; and responsibly challenging existing procedures, policies, or authorities.

HIGHER	***Blue Collar Worker Supervisor:*** *Participate as member of the J.I.T. (Just in Time, project management) team to increase the yield of a particular product*—after receiving an assignment to represent the production area on a yield improvement project, the blue collar worker supervisor meets with group members weekly to discuss objectives; participates in the decision making process; communicates objectives of the J.I.T. team to the department and area staff; prepares written instructions and submits them to the processing area staff to implement recommended changes; and provides long-term feedback from the processing area to the J.I.T. team members. Task ID#: 8091911	***Accounting/Financial Analyst:*** *Discuss with the audit team the significant issues that need to be presented to management upon completion of the audit*—communicates findings of his or her own portion of the audit with the audit supervisor; communicates findings with the entire team; listens to findings of the team; determines/discusses (as part of the team) the significant findings/issues; allocates to team members assignments to research certain significant issues; conducts assigned research; and writes a summary of findings to be incorporated into a memo to management. Task ID#: 8091721	
	Childcare Aide: *Work as a team with other teachers in the classroom*—communicate with each other to share ideas and offer assistance. For instance, they may help each other with the preparation of lesson plans, may jointly prepare the children's discovery areas, and may alternate performing the less desirable job duties, such as cleaning and laundry. The aides may take over the activities of a co-worker who may be absent and work together to learn about each other's specific job requirements, such as how to work with an infant versus a three-year-old child. Task ID#: 8091241	***Outside Equipment Technician:*** *Install a point-to-point data circuit, a job that requires action in two locations, such as two cities*— are dispatched to each of two locations where they access the customer's facilities and work as a team to install the requested circuits. They communicate with each other and work together to overcome any problems which emerge. Task ID#: 8091371	***Carpenter:*** *Share experiences and knowledge with other workers, and work in cooperation with other workers on a variety of tasks to accomplish project goals*—reviews the blueprints and project plans with other workers before the project begins, to understand what the project goals are and what each worker is expected to accomplish; listens to other team members and responds to their concerns; and works with others to accomplish tasks where several people are required, such as putting up trusses or beams. Task ID#: 8092081

Beauty Shop Owner: *Work with staff on a seasonal grouping of photographs of fashionable styles*—works with other staff to select the proper models, hairstyles, clothing for the season, accessories, and makeup for the grouping of photographs. This includes sharing tasks, such as obtaining clothing and furnishing makeup. The group shares ideas on how the models should look and arrives at the best decision. The beauty shop owner encourages other team members and guides them along instead of taking over tasks when new staff make mistakes. Task ID#: 8091101	***Waiter/Waitress:*** *Coordinate with other staff in providing service to customers*—signals to the hostess that a table is available. After the hostess seats customers at the table, the waiter/waitress approaches the table and takes the customers' orders; places orders with the kitchen staff; after food is served and eaten, notifies busboy to ensure that dishes are cleared and coffee and water glasses are full; asks supervisor to approach table if there are any problems; delivers check; asks customers to proceed to the cashier; and notifies busboy that a table needs to be reset. Task ID#: 8092011	***Plastic Molding Machine Operator:*** *Work well in group situations, such as on the assembly line for a product*—interacts with other group members to ensure that they are all working at a consistent speed; relays his or her needs to the group, such as the need to slow down or for others to pick up the work pace; and interacts with other group members to discuss identified problems, such as the recognition of a defective part. Task ID#: 8091391
Farmer: *Handle manure (e.g., cleaning the barn and spreading manure on fields)*—sets the spreader in place (farmhand A). The other farmer, using a tractor with loader, fills the spreader (farmhand B). Then the first farmer spreads the manure on the field. Once the manure is spread, both farmers use hand scrapers and shovels to clean areas missed by the tractor. Task ID#: 8091631	***Order Filler:*** *Help out in different departments as needed*—tells the manager when he or she is having a slow period; reports to a department where extra help is needed, as specified by the manager; and works temporarily in that department until requested to return to his or her own department. Task ID#: 8091961	***Traffic, Shipping and Receiving Clerk:*** *Communicate and cooperate with other workers on shipping, receiving, and/or stock teams to ensure that materials are unloaded and transported to designated storage areas or assembly lines in a timely manner*—unloads material from the truck to dock; loads material on to the automatic guidance system (AGS) or requests help in loading the material onto the AGS; programs the destination of the AGS; notifies the line stocker that needed parts have arrived so that he or she can unload the needed parts and act upon them as needed; and reprograms the AGS to return to the shipping dock so that equipment will be accessible as needed. Task ID#: 8091531

LOWER

C10 Teaches Others - Helps others learn. Demonstrating competence in teaching others includes helping others to apply related concepts and theories to tasks through coaching or other means; identifying training needs; conveying job information to allow others to see its applicability and relevance to tasks; and assessing performance and providing constructive feedback/reinforcement.

HIGHER	***Industry Training Specialist:*** *Conduct specialized training sessions to provide instruction for specified employees*—consults with management to identify the training needs of the specified employee group; prepares training outline; compiles selected information on the training topic; develops materials, such as training manuals and visual aids; conducts the training session on the specified topic; tests trainees to assess the effectiveness of the training; and provides follow up training as needed. Task ID#: 8101891	***Blue Collar Worker Supervisor:*** *Train new employees in production line job tasks*—identifies and conducts training required for specific tasks; acquaints the employees with the overall company operation; explains company's policies and procedures; assigns new employees to production line personnel for on-the-job training of job tasks and equipment operation; monitors new employees during on-the-job training period; assists personnel, as needed, with individualized training; evaluates new employees at three, six, and twelve month intervals to measure performance; and documents performance for personnel files. Task ID#: 8101521	***Outside Equipment Technician:*** *Teach a new technician how to perform the job*—determines what the new technician knows; divides the areas in which he or she needs instruction; provides instruction in those areas using both oral instruction and hands-on training; takes the new technician to customer locations and shows by example how to deal with customers; critiques the trainee's work on location; and provides feedback to management on other kinds of training the new technician may need. Task ID#: 8101431
	Telemarketing Representative: *Teach new representatives and others about the industry, the company's competitors, and the company's products and services*—answers questions about a product or issue; provides a lunch session on a specific topic to help individuals to become knowledgeable and sound informed to customers; provides memos to others about a specific topic area; monitors new employees' telephone calls and offers them information and feedback in order to coach them through calls; offers assistance to new telemarketing representatives in the refinement of their opening sales pitch. Task ID#: 8102331	***Beauty Shop Owner:*** *Train a new employee*—assesses the nature and extent of the individual's technical and personal skills; communicates to the trainee that he or she will receive constructive criticism which is not meant as a personal attack; prioritizes information to be learned; models and explains proper procedures to the trainee; and allows the trainee to practice the procedures, first with the owner and then independently. When then owner deems the trainee to be ready, the owner allows the trainee to perform work activities independently. He or she monitors the trainee's performance and provides feedback. Task ID#: 8101421	***Carpenter:*** *Teach an apprentice how to perform necessary tasks*—To build footing and wall forms, for example, the carpenter explains and shows to the apprentice each step of the process, including why the step is necessary, the importance of accuracy, and the consequences of mistakes; shows the apprentice how to do the job using the proper tools; lets the apprentice do the task and observes his or her performance; and corrects mistakes and improper handling of tools. Task ID#: 8101751

Plastic Molding Machine Operator: *Teach new operators how to perform the functions of the job*—trains the new operators to distinguish between a good and bad part by showing them what each part looks like. The worker also demonstrates assembly and injection molding process procedures to new operators. The operator monitors the new employees while they perform the above-mentioned operations. The new operators work independently upon the decision of the supervisor. Task ID#: 8101391	***Beauty Shop Owner:*** *Model proper techniques to a hairstylist*—recognizes a stylist having a problem with some aspect of styling hair; allows the hairstylist to observe him or her working with a client and, after a period of observation, allows the stylist to finish the styling exercise. The owner encourages the stylist while he or she works and allows the stylist to perform independently when the owner decides that the stylist is ready to do so. Task ID#: 8101361	***Accounting/Financial Analyst:*** *Teach a co-worker the procedure for sending bi-monthly memos*—obtains a copy of the financial report from the corporate files and calls division personnel to discuss why a memo was needed; highlights division accounts and dollar figures to be included so the co-worker can easily find them; explains to the co-worker the reason for memo and what needed to be included (highlighted portions); copies journal vouchers for the co-worker; explains to the co-worker what voucher information was to be included in the next memo; proofreads the co-worker's memos; and explains any problems or necessary corrections to the co-worker. Task ID#: 8101711
Computer Operator: *Teach users how to operate the computers*—shows the user how to start the computer system and how to pick a program application (e.g., LOTUS) from the menu; explains the application usage; and shows the user how to shut down the computer. Task ID#: 8101951	***Farmer:*** *Teach an unknowledgeable worker the proper operation of the milk parlor*—demonstrates to the workers how to properly operate a milking machine, dispense medicine, move cows from a holding pen to a milk parlor, and properly mix the bottle milk fed to newborn calves. Task ID#: 8101191	
Telemarketing Representative: *Model successful telemarketing behaviors to new employees*—carries out his or her duties in a way that helps new representatives acquire the principles and techniques of successful telemarketing. Task ID#: 8101611		

LOWER

C11 Serves Clients/Customers - Works and communicates with clients and customers to satisfy their expectations. Demonstrating competence in serving clients and customers includes actively listening to customers to avoid misunderstandings and identifying needs; communicating in a positive manner especially when handling complaints or conflict; efficiently obtaining additional resources to satisfy client needs.

HIGHER	***Medical Assistant:*** *Listen to a patient to determine his or her needs and feelings*—listens to a patient's anger, frustration or other feelings in a calm manner, soothes the patient, and explains the need to voice problems or concerns with the physician, as appropriate. The assistant also listens to a patient who communicates outside information, and explains how the patient's case is different, why the physician is using a specific treatment, or why certain medications have been prescribed. The assistant also notes the patient's concerns on the patient chart so that the physician can contact the patient and schedule an interim appointment. Task ID#: 8111541	***Construction Contractor:*** *Serve customers in a way that satisfies them and allows the contractor to remain in business*—identifies the client's needs both formally and through informal means and determines the relative priority that the client places on project elements, including time, quantity, and quality (e.g., some customers want the highest quality regardless of cost, while some require only functional quality); convinces clients that he/she is striving to meet their needs; shares responsibilities and frustrations with project progress; and ensures that client needs are met. Task ID#: 8112211	***Graphic Designer:*** *Work and communicate with the client to satisfy his or her expectations*—actively listens to the customer's ideas and takes notes; determines the feasibility of completing the project; communicates ideas to the customer and estimates for the customer the cost of the project; completes a rough draft of ideas; reviews rough drafts with the customer to get the customer's input regarding revisions or the customer's approval to proceed with the project; and communicates regularly with the customer until the final draft drawings are completed and sent to the printer. Task ID#: 8112041
	Customer Service Representative: *Communicate and work with customers in order to satisfy their specific needs*—listens to customers; understands and identifies their needs; is familiar with the merchandise and knows potential substitutes to requested items; communicates all information to the customer in a positive, helpful, and sensitive manner so that even if the desired merchandise is unavailable, the customer has a positive image of the store. Task ID#: 8111251	***Programming Technician:*** *Install computer systems*—calls the customer to coordinate installation and logistics activities (where to stay, directions to the site); confirms that the hardware is on site with the field engineer; installs the software; schedules/conducts customer's training (for getting information from the old system onto the new system); documents the proficiency of customer training and requests evaluations while on site; troubleshoots the problems that occur on "live day" (when a system becomes operational); and writes a trip report. Task ID#: 8111851	

Computer Operator: *Install a printer for a user who is not computer literate*—introduces himself or herself to the user who is receiving the equipment. The operator assesses the user's level of understanding of computers and adjusts the explanatory terminology accordingly. Next, the individual installs the printer and explains its operation to the user. Task ID#: 8111041	***Customer Service Representative:*** *Assist customers in selecting merchandise or resolving complaints*—responds to a customer request for specific merchandise; receives payment for the merchandise and handles the cash or credit card transaction; accepts return merchandise from the customer; listens to reasons for dissatisfaction with the product and records this information; and resolves complaints regarding service or faulty merchandise. Task ID#: 8111451	***Beauty Shop Owner:*** *Accommodate last minute regular customers when the salon is fully booked*—receives a call from a regular customer asking for an appointment during a time in which the salon is booked. The owner books the customer for an appointment at a different time, but waitlists the customer for the original time. When a cancellation occurs, the owner contacts the customer and offers the earlier time slot. This action leaves the customer with the feeling that the salon makes every attempt to accommodate its customers. Further, hairstylists frequently work early or late to accommodate a regular customer. Task ID#: 8111361
Truck Delivery Salesperson/Outside Sales: *Call on an existing customer at a time that is best for both the customer and the salesperson*—acquires a familiarity with the routines followed by customers and lays out the route in order to accommodate these routines. Refining knowledge of the customer's schedule, the salesperson helps the customer when possible (e.g., checking the customer's current inventory). Task ID#: 8111401	***Truck Delivery Salesperson/Outside Sales:*** *Instill confidence in the customer that services will be provided reliably and fairly*—assures the customer of dependability (i.e., that the salesperson will be there to provide service needs) and that the salesperson can provide the services and products needed. Task ID#: 8111831	***Carpenter:*** *Resolve customers' problems in a satisfactory manner*—investigates the identified problem and performs any necessary repairs. The carpenter follows up with the customer to ensure that the repairs are satisfactory. Task ID#: 8111301

LOWER

C12 Exercises Leadership - **Communicates thoughts, feelings, and ideas to justify a position, encourages, persuades, convinces, or otherwise motivates an individual or groups, including responsibly challenging existing procedures, policies, or authority. Demonstrating competence in exercising leadership includes making positive use of the rules/values followed by others; justifying a position logically and appropriately; establishing credibility through competence and integrity; and taking minority viewpoints into consideration.**

HIGHER			
	***Assistant Housekeeper:** Lead group meetings of employees*—calls all of the employees in for the monthly meeting (usually in memo form); talks about the strengths/weaknesses of the work performance (as reflected in the customers' comments); gives recommendations for improvement; listens to employee feedback; and tries to motivate the employees to do well, to accept criticism, and to work as a team. Task ID#: 130131	***Teacher's Aide:** Explain to children the importance of self control, discipline, and respect*—conducts a motivational "rap session" with a group of children to explain the rules which they need to follow at school. Next, the teacher's aide reminds them that these rules apply not only in school but in the real world, and that these rules can help make them successful. The following step is to listen to the students' challenges, questions, and feedback. The last step is to respond to their questions and challenges. This usually entails making sure that the students know that the rules and issues do not change from school to school and that they must conform to these rules. Task ID#: 130061	***Dietary Manager:** Motivate food service staff to achieve and maintain high standards of customer service, despite negative aspects of the job*—listens to the concerns/complaints of food service workers about rude or irate customers; encourages food service workers to provide good customer service, especially in difficult situations; provides the staff with instructional material on good customer service; role plays as a customer to assess staff customer service; and provides feedback to staff on customer service performance. Task ID #: 8121861

Offset Lithographic Press Operator: *Create an improved method of performing a task*—must first explain to his or her colleagues the method of improvement and convince them of its efficacy by demonstrating the process. The operator must then perform the same role with the foreman, and the foreman must in turn convince the pressroom manager, who will make the change. Task ID#: 130511	***Graphic Designer:*** *Use leadership skills to convince others that change and evolution are not only necessary but desirable*—studies a proposed job to determine the client's needs, and considers various methods for effectively achieving the desired results; presents the proposal to the client in a positive and persuasive manner; convinces the client to be open to new and different concepts; and motivates clients, staff, and vendors to do the best job possible. Task ID#: 8121691	***Teacher's Aide:*** *Persuade co-workers to attend a paraprofessional conference*—explains the benefits of the conference to the group verbally and using handouts and brochures detailing the conference. The aide also explains to the group that the system in which they operate (the school system) values and requires such knowledge. Finally, the aide answers any questions raised about the content and the process of the conference. Task ID#: 130071
Industry Training Specialist: *Persuade new employees to adopt and adhere to high standards of performance*—distributes copies of the company's policies and standards to new employees; stresses the importance of and encourages adherence to the company's rules; and acts as a model employee to exemplify the company's policies and standards. Task ID#: 8121891		

LOWER

C13 Negotiates to Arrive at a Decision - Works toward an agreement that may involve exchanging specific resources or resolving divergent interests. Demonstrating competence in negotiating to arrive at a decision involves researching opposition and the history of the conflict; setting realistic and attainable goals; presenting facts and arguments; listening to and reflecting on what has been said; clarifying problems and resolving conflicts; adjusting quickly to new facts/ideas; proposing and examining possible options; and making reasonable compromises.

HIGHER

Expeditor/Purchasing Agent: *Resolve an issue between the company and the supplier so that both parties are satisfied with the decision*—listens to a supplier who insists that the blueprints submitted by the company are in error and that the part cannot be made to strength using the blueprints submitted; looks at the blueprints showing how the part is to be built to ascertain where the supplier is having problems and how to explain to the departments involved what and where the specific problem is; contacts manufacturing and engineering departments, who are insistent in their views regarding the blueprints and the part, and informs them of the problem that the supplier is having adhering to the blueprint specifications and why; and listens to both sides of the issue, getting both parties to listen to the other's viewpoint and then negotiating with both parties to come up with suggested changes (i.e. change blueprint) that both sides can agree upon without altering the product. Task ID#: 8131681	***Dietary Manager:*** *Counsel employees to reach a mutually agreeable solution to a conflict*—listens to each employee's version of a disagreement; tries to keep employees calm; reflects on the information each employee shared; and tries to determine particular employee needs in the situation. Afterwards, the manager meets jointly with the employees involved, explains the points of view, and tries to resolve the conflict or offer a compromise which will promote a smoothly running operation. Task ID#: 8131551	
Expeditor/Purchasing Agent: *Negotiate with vendors to obtain the best merchandise available at the lowest possible cost*—compiles and analyzes industry sales data to identify goods in demand; selects vendors to interview based on that information; interviews vendors to learn about products, prices, and their ability to meet the needs of the company; and negotiates with vendors to obtain contract terms that best meet these needs. Task ID#: 8131901		

Telemarketing Representative: Negotiate with a customer to close a sale**—convinces the customer of the merits of a particular product, receives resistance from the customer, acknowledges the resistance, and brings out or establishes a need for the product; offers new information to inform the customer of the benefits of the proposed system over that of a competitor's, sharing this information in a way that sparks interest and allows the customer to overcome his or her resistance without losing face. Task ID#: 8132321**		

LOWER

C14 Works with Cultural Diversity - **Works well with men and women and with a variety of ethnic, social, or educational backgrounds. Demonstrating competence in working with cultural diversity involves understanding one's own culture and those of others and how they differ; respecting the rights of others while helping them make cultural adjustments where necessary; basing impressions on individual performance, not on stereotypes; and understanding concerns of members of other ethnic and gender groups.**

HIGHER

Law Enforcement Officer: *Resolve conflicts which arise between individuals of different cultures*—determines the nature and underlying reasons behind the conflict. Gathering facts and the perspectives of each participant, the officer uses this information to search for a basis for compromise, and takes care not to take sides or to ask one party to compromise more than the other. The officer takes steps to diffuse the aspects of the conflict situation that relate to cultural or gender differences and to diffuse any accusations that the officer is culturally biased in handling confrontations across groups (including members of his or her own ethnic group). Task ID#: 8141061	***Assistant Housekeeper:*** *Counsel an employee from another culture on personal grooming habits*—identifies a problem with an employee's grooming habits, then collects information about it from others before beginning counseling. The assistant housekeeper is able to recognize that the hygiene habits of an employee may be different from the habits of most of the other workers because of cultural differences. The assistant housekeeper counsels the employee, in private, and offers alternatives to his or her present grooming routine. Finally, the assistant housekeeper follows up to ensure that grooming standards are being met. Task ID#: 150391	***Registered Nurse:*** *Make home visits in neighborhoods of other cultures*—speaks the language of that culture to patients to facilitate communication. Also, the registered nurse is familiar with the culture and why patients have certain habits and attitudes. This helps the registered nurse to understand why certain behaviors that can lead to disease, alcohol addiction, pregnancy, etc., are accepted. Task ID#: 150621
Assistant Housekeeper: *Supervise housekeepers with a wide variety of cultural backgrounds and differing levels of proficiency in English*—evaluates how much English a housekeeper knows, and then apply individualized solutions to situations that arise from language differences. The assistant housekeeper places personal biases aside and discovers different ways to communicate needed information (i.e., demonstrations, hand signals). Task ID#: 150381	***Quality Control Inspector:*** *Communicate with different ethnic/language groups where there is a barrier to understanding*—Performing this task may require the quality control inspector to recognize that it is not possible to make a potential violation understood over the telephone and that he or she may have to meet the perpetrator in person. During this inspection, the inspector understands that differences in lifestyle may affect an individual's understanding of the safety regulations and thus also affect his or her actions. For instance, many immigrant owners have worked with dangerous materials before entering the United States and do not understand either the problem with doing this or the need for regulations. Task ID#: 8141591	

Secretary: *Assist non-English speaking customers*—observes a customer in the bank lobby who needs to go to a branch to cash a check. He or she gives directions for finding the branch office in Spanish. Task ID#: 150081	***Teacher's Aide:*** *Understand the language and manners of foreign-born students in order to effectively interact with them*—listens to the students' ideas and concerns about their culture in order to understand where their behavior and thoughts originate. Task ID#: 150071	***Offset Lithographic Press Operator:*** *Make sure that expertise and not ethnicity is the determining factor for a work assignment*—determines what kind of expertise is needed to perform a job and who has the best qualifications for running the job. The operator then asks that person to handle the job, regardless of his or her ethnic or racial background. Further, the operator makes sure that no ethnic or racial slurs enter the work place and encourages all employees to work together. Task ID#: 150491
Truck Driver: *Deliver a package to a Spanish-speaking customer*—goes to a delivery location and the customer does not speak English. The driver uses language skills (limited Spanish) to communicate the transaction. The driver completes the delivery by obtaining a signature on the delivery record. Task ID#: 150291	***Bank Teller:*** *Serve customers who speak another language*—attempts to communicate by using gestures, or may get the foreign currency teller to help. He or she asks questions and carries out the actions. Finally, the transaction is performed. Task ID#: 150101	***Licensed Practical Nurse:*** *Communicate and relay information to people who do not speak English*—recognizes that the person does not speak English and that it will be necessary to relay some information to the person. The nurse tries to convey or obtain information with gestures, tries to find another nurse who speaks the second language, or searches the computer for an interpreter and contacts the listed individual. If no names are found, the nurse contacts the nursing office about obtaining an interpreter. Task ID#: 8141771
Licensed Practical Nurse: *Obtain an interpreter to communicate with a non-English speaking patient*—discovers that he or she is unable to communicate needed information to the patient and calls for an interpreter to communicate lab results, breast feeding information, etc. Task ID#: 8141781	***Registered Nurse:*** *Meet patients' spiritual needs*—informs the patient when services are held. He or she also informs the patient that services can be watched on videotape and that a chaplain is available for private visits. Task ID#: 150051	

LOWER

C15 Understands Systems - Knows how social, organizational, and technological systems work and operates effectively within them. Demonstrating competence in understanding systems involves knowing how a system's structures relate to goals; responding to the demands of the system/organization; knowing the right people to ask for information and where to get resources; and functioning within the formal and informal codes of the social/organizational system.

HIGHER

Programming Technician: *Implement an enhancement to the current system*—studies the impact of the enhancement to the current system; locates the source code affected by the enhancement; sets up a test job and creates test data for verification of the new system; requests data from other companies, if necessary; runs the test job with the required data; compares the results before and after the change; and notes differences. Task ID#: 8152001	***Outside Equipment Technician:*** *Understand technical and organizational systems in order to service switch outages*—is charged with handling a customer's service outage. The technician must understand how the customer's equipment interfaces with the local telephone system in order to properly service the call, and have an understanding of the entire telecommunications system. In order to solve the outage problem, the technician uses his or her knowledge of relevant systems to call the terminal for the proper switch group and moves down the line contacting the right units to resolve the problem. Task ID#: 8151371	***Programming Technician:*** *Understand a customer's organization and its procurement process by working on the account over a long period of time*—determines who the organization's decision makers are; what computer systems are currently in use; how the technician's organization relates to those systems; what the customer's procurement process is; what the customer plans in the area of systems developments; and where the systems engineers of the technician's organization can be of service. Task ID#: 8151851
Computer Operator: *Add a new terminal to an existing network*—responds to a request from upper management to add a new terminal to an existing network. The operator determines the potential users and purpose for the terminal to assure access to the appropriate systems. Next, the operator installs the terminal and network cable, tests the terminal for access to the desired systems, enters the network operating system, and adds the user to the system. Task ID#: 8151041	***Dietary Manager:*** *Acquire the resources needed to upgrade equipment in a resource-scarce environment*—identifies ways in which the request for new equipment relates to the needs of the organization; speaks with vendors and reviews equipment specification sheets to compile information on the potential benefits of the equipment to the organization; prepares a requisition detailing information obtained about the equipment; and presents the requisition to upper management. Task ID #: 8151861	***Customer Service Representative:*** *Provide information to customers about the services available throughout the store*—learns/knows the company's departmental structure; learns/knows the policies within the various departments; learns/knows how a department's goals relate to company goals; and responds to customer questions, applying knowledge of the company's policies, objectives, and organizational structure. Task ID#: 8151921

Medical Assistant: *Understand the system of the organization and the organization's ultimate goal (i.e., excellent patient care)*—attains knowledge of the organization and keeps up with changes; responds to demands of the system when assignment changes occur; stays current on which departments in the system handle what specialties; and learns what patient services are offered by resources outside of the organization. Task ID#: 8152061	***Hairstylist/Cosmetologist:*** *Understand how a beauty salon operates and perform the job within that framework*—knows state laws requiring sanitation in a beauty salon and sterilization of hand tools. Further, he or she understands the work flow of a salon—which includes initial contact with the customer, the scheduled appointment, the importance of maintaining the schedule, accepted procedures for cutting, styling, and applying chemicals to the hair; the use of equipment such as hair dryers or ultra-violet or heat lamps for perming or coloring hair, and operation of the cash register. Task ID#: 8151281	***Traffic, Shipping and Receiving Clerk:*** *Unload and direct material throughout the plant to storage and assembly line, in accord with company policy*—looks up and identifies the storage area for a specific part from a company layout plan; knows how materials flow in and out of the system; and knows the procedures for shipping materials out of the plant and for returning misdirected or excess materials. Task ID#: 8151531
Waiter/Waitress: *Understand and use the Option To Leave Early (OTLE) system*—understands that the OTLE system goes into effect near the end of the evening; realizes that the number of tables being serviced will increase because other waiters are being told to leave early; understands that the decrease in waitstaff means less labor costs to the company; and accepts the added responsibility of servicing more tables. Task ID#: 8152091	***Dental Hygienist:*** *Work in conjunction with the office dental care personnel in operating the patient recall system and understanding the separate responsibilities of the various dental office staff*—calls patients into the office according to the specified office procedures; understands the separate responsibilities of different office staff such as dental assistant versus dental hygienist; performs only the duties specifically designated to the dental hygienist according to general practice, the Dental Hygienist Associations, and the Licensure Boards. Task ID#: 8151331	***Childcare Aide:*** *Know where to go within the organization's management system when a problem arises*—identifies a problem and determines who within the organization can resolve it. The aide also reviews manuals located in the main office to gather suggested courses of action. Task ID#: 8151241
Telemarketing Representative: *Aware of information recording responsibilities, including knowing what information to input and how to input it correctly*—familiarizes him or herself with the keyboard and learns how to use the computer system. Task ID#: 8151601		

LOWER

C16 Monitors and Corrects Performance - Distinguishes trends, predicts impact of actions on system operations, diagnoses deviations in the function of a system/organization, and takes necessary action to correct performance. Demonstrating competence in monitoring and correcting performance includes identifying trends and gathering needed information about how the system is intended to function; detecting deviations from system's intended purpose; troubleshooting the system; and making changes to the system to rectify system functioning and to ensure quality of product.

HIGHER	***Construction Contractor:*** *Improve productivity by monitoring and correcting the performance of construction functions*—identifies the need to monitor and correct performance; designs an overall plan to do so; and breaks down the job into monitoring elements; correlates the unit elements with the overall project plan (assigning cost codes) and summarizes job costs with a job element breakdown; monitors performance with planned construction objectives; identifies unacceptable variances, attempts corrective action, and continues to monitor. Task ID#: 8162241	***Construction Contractor:*** *Monitor field staff productivity*—obtains cost reports that represent the labor and material expenses and compares actual project costs to date with estimated unit costs. Determining the adjustments necessary to correct or change current performance which deviates from estimated costs, the contractor implements changes to improve productivity. Task ID#: 8162221	***Industry Training Specialist:*** *Monitor the effectiveness of agency training programs, modifying training techniques, as needed, to ensure the relevance of the material and attainment of training objectives*—keeps abreast of current training information so that training participants receive the most updated information; monitors the agency training programs to ensure that they meet the specified training objectives; reviews participants' evaluation forms; interviews the program's participants and their managers to assess whether program goals were achieved; and changes training techniques, procedures, materials, or training time, if needed, in order to achieve the program's objectives. Task ID#: 8162181
	Construction Contractor: *Monitor equipment maintenance (internal and external) and optimize cost effectiveness against each option*—assesses budget expense against actual expenses; assesses equipment utilization versus down time (non-operational status); and decides if estimated and actual costs are within expectations. Based on all of this information, the contractor chooses an appropriate option for equipment maintenance. Task ID#: 8162231	***Hotel Account Executive/Sales Executive:*** *Conduct follow up visits with a client and correct staff performance to ensure that services delivered meet the conditions of the sales agreement*—reviews the client's contract to verify the services requested; contacts the client and receives feedback on services provided; prepares a memo to the general manager detailing suggested policy or procedure modifications to address any identified problem; contacts the head of the department of any identified problem area; negotiates methods to correct procedures to avoid future service-related complaints; and follows up to ensure that corrective measures have been implemented. Task ID#: 8161471	***Accounting/Financial Analyst:*** *Electronically convert information to a different system (e.g., to monitor accounts payable translation)*—runs a program to take raw data from the accounts payable (AP) system and convert it to a general ledger; compares the general ledger total with the AP system total; determines the origin of a variance (the general ledger or the AP system); reviews detailed transactions, paying attention to amounts, dates, and account numbers; assesses amount of discrepancies; deletes incorrect data from the general ledger; corrects the fiscal calendar with the AP system to include all days of the fiscal month; and resubmits data to the general ledger. Task ID#: 8161841

Quality Control Inspector: *Make citation decisions on the basis of the proper information*—is familiar with the safety standards to be adhered to by employers; distinguishes between applicable safety standards and general work practices; and cites safety standards which are in violation even if the violation is a result of a "general work practice." Task ID#: 8161621	***Travel Agent:*** *Monitor the performance of other travel agents as well as oneself to ensure that all customers are served in a timely manner*—monitors other travel agents' performance and suggests alternative routes to enhance itineraries. To protect customers from unpleasant experiences during travel, the agent corrects his or her own mistakes, as well as those of other agents, and contacts customers to inform them of any mistakes or changes in travel. Task ID#: 816220	***Accounting/Financial Analyst:*** *Perform analyses comparing current expenditures with projected needs and revenues*—obtains expenditure, enrollment, and cost-of-living data; compares data with projections and calculates the resultant surplus or deficit; and communicates these results to the relevant person(s). Task ID#: 8161051
Food Service Manager: *Evaluate the performance of workers and adjust work assignments to increase staff efficiency*—observes workers on the job to determine worker efficiency; polls clients to ask about worker efficiency; and makes work assignments according to performance. Task ID#: 8162071	***Plastic Molding Machine Operator:*** *Monitor gauges and dials to ensure that the machine operates at the proper rate of speed*—turns on the machine and allows it to stabilize. The operator scans all gauges and dials, including those for the melt rate and extruder rpm, to ensure that the machine is operating optimally. Any problems with the machine's operation are solved by turning down the feed rate and changing the dirt screen, or turning off the feed rate when necessary to readjust the machine. Task ID#: 8161381	
Travel Agent: *Process a variety of airline tickets (prepaid, standard, and automated) on new ticket forms instituted by management*—inputs information into the computer and prints out customer's airline ticket; brings computer back up when it goes down, gets it on line, and makes sure printer is working properly so tickets will come out correctly; observes ticket being printed to detect any malfunction; informs management of problem with new ticket form (e.g., the continuous jamming of printer by form because of its thickness); uses hard copy system to print ticket for customer to prevent any delays for customer. Task ID#: 8161761	***Plastic Molding Machine Operator:*** *Complete the firm's statistical process control (P) charts*—removes products from the press and inspects them against the specified criteria. Defects are recorded and charted hourly on the P chart. Further, the operator records out-of-range values on the back of the chart. Task ID#: 8161111	

LOWER

C17 Improves and Designs Systems - Makes suggestions to modify existing systems to improve products or services, and develops new or alternative systems. Demonstrating competence in improving or designing systems involves making suggestions for improving the functioning of the system/organization; recommending alternative system designs based on relevant feedback; and responsibly challenging the status quo to benefit the larger system.

HIGHER	***Graphic Designer:*** *Design a quality control system which uses both the human and mechanical components of the organization*—ascertains what quality control measures are now in effect and determines what portions of the system should be changed to effect a better method of quality control; designs an improved system for quality control, using new methods of recordkeeping and increased personal responsibility; and checks periodically to make sure that the new system is being used as designed, and that the method is effective. Task ID#: 8171691	***Blue Collar Worker Supervisor:*** *Write proposal to automate filling process*—recognizes an inconsistency in yields between different kinds of drying equipment due to the manual filling process; consults with the engineering department staff to determine new technology available to accurately measure volume; reviews recommendations from the engineering department and considers limitations of the new technology; tests the recommended equipment; decides to implement the new technology; and writes a proposal to automate filling process, using the test results to justify. Task ID#: 8171911	***Dietary Manager:*** *Develop a nutritional screening program to improve identification of nutritional needs*—conducts a comparison of present nutritional screening programs used at similar facilities and adopts a screening program appropriate for development. The manager reviews the proposed program with the dietitians and other pertinent staff, modifies the program by incorporating staff suggestions, and presents the proposed program to top management. After making requested changes or negotiating ideas, the manager submits the revised form to the administrator for approval. The dietary manager conducts in-service training on the new program for dietitian staff and implements the new program. Evaluating the results, the manager makes any program changes that are needed and reports the results to top management. Task ID#: 8171461
	Expeditor/Purchasing Agent: *Effect a change in department policy that benefits the company as a whole*—recognizes a deficiency in department policy that limits buyer options and inhibits performance/productivity; meets with a supervisor to express concerns and recommend solutions; prepares a written version of his or her concerns and recommendations for submission to upper management by the supervisor; attends meeting with the supervisor and upper management to discuss the possible policy change. Task ID#: 8171901	***Licensed Practical Nurse:*** *Improve the system for communicating the needs of substance abuse mothers to the nurse, social worker, public health nurse, physician, etc.*—identifies the need for improvement; decides upon the best method of improvement, such as setting aside a day each week for a multi-disciplinary meeting—(physician, social worker, nurses, home health care coordinator, etc.); and discusses the patients'needs for follow up or protective services by assessing the patient's ability to provide for the child once the patient is released. Task ID#: 8171781	***Truck Delivery Salesperson/Outside Sales:*** *Correct the impact of customer loss on the route*—responds to customer loss by reviewing other options for growth. The salesperson redesigns the route to include areas with growth potential. Determining what products are selling, the individual suggests new product lines to the manager. The salesperson also suggests ways to attract and retain customers (e.g., price undercutting) and improvements to management systems (e.g., a system to support salespeople). Task ID#: 8171401

Quality Control Inspector: *Compare the employer's present training program with standards or requirements*—reviews the safety and health aspects of the inspected organization's training policies; determines whether these policies are meeting legal requirements; and, if they are not, suggests ways to improve compliance. Task ID#: 8171801	***Hotel Account Executive/Sales Executive:*** *Improve and design a new menu system*—looks at the menu from the previous year; prices out the menu by talking to the chef and purveyors; updates the menu system and gives a critique to the general manager; makes appropriate changes to the menu; and sends the menu out for printing. Task ID#: 81711971	***Traffic, Shipping and Receiving Clerk:*** *Determine more efficient ways to stack merchandise*—observes the processes involved in loading, unloading, and moving merchandise; develops an idea for performing these activities more efficiently; shares the idea with his or her supervisor; and implements changes which ultimately save money or prevent damage to merchandise. Task ID#: 8161321
Telemarketing Representative: *Use customer-generated information about the telemarketing company's competitors to improve the company's products/services*—recognizes that a customer is supplying potentially useful information on competitor's products or services and relays this information to management for use in the development and improvement of current products or services. Task ID#: 8172321	***Beauty Shop Owner:*** *Change an established way of performing one aspect of the business*—sits down with colleagues and talks about changes that are needed to improve the service and quality of work; presents image of what can be achieved by change; refines proposed change; and puts proposal into operation. Task ID#: 8171791	***Waiter/Waitress:*** *Suggest an improvement based on feedback from customers*—receives negative comments on a certain item many times; brings these comments to the chef's attention; offers suggestions for improvement; and persists in making sure that the suggestion is carried through. Task ID#: 8172011

LOWER

C18 Selects Technology - Judges which set of procedures, tools, or machines, including computers and their programs, will produce the desired results. Demonstrating competence in selecting technology includes determining desired outcomes and applicable constraints; visualizing the necessary methods and applicable technology; evaluating specifications; and judging which machine or tool will produce the desired results.

HIGHER	***Construction Contractor:*** *Obtain the necessary equipment to complete a construction project successfully*—evaluates the equipment requirements for the project; determines the physical and environmental conditions that impact on equipment selection; compares the requirements with prevailing site conditions; and makes a selection of equipment. Task ID#: 8182221	***Programming Technician:*** *Help the user define hardware and software requirements for database application*—determines the size of the database in order to define the requirements of the storage hardware (i.e., size of the hard drive); determines how many users will need to access the system simultaneously; determines how quickly data need to be retrieved; and chooses the hardware, operating system and database software. Task ID#: 8181821	***Blue Collar Worker Supervisor:*** *Select the appropriate filter/dryer to increase the capacity of a particular product*—examines product literature and attends vendor presentations to observe equipment in operation; meets with the engineering department staff, area equipment operators, and quality control staff to decide on the best equipment and to select a vendor; installs the equipment to run test; compiles data from the results and prepares slides/transparencies and charts for a visual presentation; presents recommendations to management for approval; writes cost justification for the equipment, including data on labor savings impact; submits the cost justification to the engineering department for a capital expenditures request; upon approval, installs the equipment; and writes operating procedures. Task ID#: 8181911
	Graphic Designer: *Determine which tools could best accomplish the work required to meet the goals of the project*—reviews the customer's ideas; evaluates the methods/tools to be used to accomplish the project; chooses particular tool or method to be used to produce rough drafts; and looks at the customer's project, rough drafts, and alternate printing methods and determines which method would best accommodate the project. Task ID#: 8182041	***Dietary Manager:*** *Purchase new kitchen equipment based upon the facility's needs and the condition of the old equipment*—contacts suppliers to inform them of the need for equipment; sets up appointments for demonstrations and/or an explanation of the features of the equipment; writes up proposals and sends out purchase orders to suppliers for solicitation of bids; reviews bids to determine the best equipment to purchase based on the needs of the facility, features of the equipment, purchase cost, and budgetary constraints; and purchases equipment and has it installed. Task ID#: 8181551	***Farmer:*** *Choose an appropriate hay baler based upon certain contingencies*—evaluates market information and the labor expenditures which are required for each given hay baler. Further, the farmer evaluates the farm's feeding and storage facilities and, finally, makes a choice based upon these evaluations. Task ID#: 8181151

Quality Control Inspector: *Choose the proper tools for a task involving checking for electrical problems*—determines the nature of the problem (i.e., electrical), chooses the appropriate tools for the task, and uses the tools to explore the problem. Task ID#: 8181621	***Licensed Practical Nurse:*** *Treat a jaundiced baby*—helps the doctor decide what tools will best bring down the jaundice level of the child; places the baby under a phototherapy light (to bring down the jaundice level) and in a heated isolette (incubator) to observe the baby and administer heat. Task ID#: 8181781	
Plastic Molding Machine Operator: *Select the proper technology needed to complete a product within specifications based upon the nature of the product and output*—removes the product from the press and allows it to cool. The operator then identifies areas to be trimmed or burned and selects the proper tools for use in these processes. Next, the tools are applied to the task at hand. Task ID#: 8181111	***Licensed Practical Nurse:*** *Decide on the appropriate technology, such as which tools are needed to change a patient's dressing*—thinks about the type of dressing to see what tools are relevant; selects the appropriate tools (for instance, if it is necessary to remove staples, a staple remover and 4" x 4" gauze dressing); selects clamps and suction configuration if the dressing includes a drain removal; and removes the dressing. Task ID#: 8181771	***Optician:*** *Select the appropriate procedures and tools to adjust eyeglasses*—observes the fit of eyeglasses on the patient's face to determine the required adjustments, and selects the tools or equipment needed to make the adjustment. Task ID#: 8181871

LOWER

C19 Applies Technology to Task - Understands the overall intent and the proper procedures for setting up and operating machines, including computers and their programming systems. Demonstrating competence in how to apply technology to task includes understanding how different parts of machines interact and how machines interact with broader production systems; on occasion installing machines including computers; setting up machines or systems of machines efficiently to get desired results; accurately interpreting machine output; and detecting errors from program output.

HIGHER	***Quality Control Inspector:*** *Identify the various technologies interacting in a machine or process in order to determine whether the technology (in this case a foot pedal on a power press) is in compliance, and to see what technology is applicable to bring things into compliance*—understands how the different systems (mechanical, electrical, hydraulic) of a machine work and how they interact to cause a machine to work; explores whether the system meets regulations (in this case, decides whether the foot pedal requires a guard to avoid inadvertent activation of the machine); and, if the system is in violation, applies relevant technology (e.g., a foot pedal guard) to deal with the violation. Task ID#: 8191801	***Programming Technician:*** *Implement a newly developed project into the production system*—completes documentation to begin the implementation; starts the process of transmitting the application project into the production system; revises jobs based on recommendations; logs into the production machine and validates the transmittal of jobs; verifies the installation of the online software; monitors jobs running under the new software; and corrects application where necessary. Task ID#: 8191991	
	Outside Equipment Technician: *Apply technology to testing a multiplex line*—identifies where the multiplex box is at the location; determines what kind of testing equipment to use; applies the testing equipment appropriately; and interprets the test results and fixes the problem. Task ID#: 8191431	***Medical Assistant:*** *Set up and operate machines required to monitor a specific patient's condition*—hooks the patient up to the EKG machine by attaching leads from the machine to the patient's legs, arms, and chest; starts the machine; monitors the machine's operation in order to detect malfunctions; and makes necessary corrections; attaches leads from the Holter monitor to the patient; inserts tape into the machine; checks batteries; and starts the machine to ensure its proper functioning; instructs patient as to what can and cannot be done while wearing the Holter Monitor; gives the patient a diary; instructs the patient as to what activities to record in the diary; removes the monitor from the patient; removes the tape from the monitor; and mails the tape out for scanning and processing. Task ID#: 8191541	***Dental Hygienist:*** *Ascertain the proper and safe use of office machinery and equipment*—reads the manuals which accompany new machinery and equipment to learn about their proper and safe use; attends training sessions on safety and use of new machinery and equipment; operates machinery and equipment according to instructions; and confers with the manufacturer of the new machinery or equipment to discuss problems or gather operating tips. Task ID#: 8192171

	Hotel Account Executive/Sales Executive: *Use the reservation computer to check reservations and the word processing function of the computer for correspondence and memos*—uses the reservation computer to reserve the required number of rooms for an incoming group; activates direct computer link to credit bureau to qualify new customers; assigns room numbers to incoming groups using availability list on the computer; checks occupancy rate to report at monthly sales meeting; and uses computer for processing correspondence and interoffice memos. Task ID#: 8191731	***Travel Agent:*** *Use the on-line computer terminal to retrieve information relating to the customer's request, plan the itinerary, and book the airline ticket*—discusses travel plans (destination, travel dates, accommodations) with the customer; retrieves pertinent information on the on-line computer terminal; plans or describes the information to the customer; books the airline ticket and hotel accommodations if the customer is satisfied with the itinerary; and prints out the ticket and itinerary. Task ID#: 8192201	***Industry Training Specialist:*** *Use available technology to enhance the professionalism of training and to conserve time*—selects specific software programs, such as word processing and graphics, to prepare training session lesson plans; and prepares flip charts and overhead transparencies to enhance lesson plan presentation for classroom sessions. Task ID#: 8191491
	Waiter/Waitress: *Run a computer financial at the end of a shift*—uses the computer to close out all opened checks; enters the appropriate transaction code numbers to receive the server financial slip; matches the server financial slip with closed checks, charge slips, and cash; and ensures that all monies balance out in accordance with the server financial. Task ID#: 8192091	***Personnel Specialist:*** *Retrieve the appropriate computer software programs to perform specified tasks*—activates the computer, enters the password to retrieve the appropriate software programs, and processes the paperwork using the appropriate software program. Task ID#: 8191501	***Telemarketing Representative:*** *Use the on-line customer information system (OCIS) to research accounts and determine previously purchased products and services*—identifies needs and recognizes the information that will be useful in addressing the needs; accesses the on-line customer information system by applying the appropriate access commands; knows and applies the commands required to access the master screen for a given customer; and gathers the needed information on past customer services. Task ID#: 8192321
LOWER	***Expeditor/Purchasing Agent:*** *Use the computer to obtain monthly and yearly inventory usage*—keys in specified commands to bring up the computer system; picks "stock status" from menu; observes the screen; writes down inventory problems; and deals with these problems accordingly. Task ID#: 8192111	***Personnel Specialist:*** *Enter employee insurance information for new or upgraded programs into a computer*—enters a specified command to bring up the computer menu; picks out a specified correction form on the menu; fills in the blanks on the computer form on screen; and saves the information. Task ID#: 8192121	

C20 Maintains and Troubleshoots Technology - Prevents, identifies, or solves problems in machines, computers, and other technologies. Demonstrating competence in maintaining and troubleshooting technology includes identifying, understanding, and performing routine preventative maintenance and service on technology; detecting more serious problems; generating workable solutions to correct deviations; and recognizing when to get additional help.

HIGHER	***Programming Technician:** Test the new release of an information management system*—studies the differences between the new release and the old system; defines testing requirements based on the differences; creates test data to cover all of the possible outcomes; runs the test jobs; identifies discrepancies between the test results and the trace findings; obtains additional help from database administrator, if necessary; and publishes results. Task ID#: 8202001		
	***Quality Control Inspector:** Identify a safety problem with an elevator and ascertain how critical the problem is to continued operation of the equipment*—assesses an elevator and notices a defect in a portion of the equipment (e.g., the top car control device, which enables one to control the elevator); determines whether the problem, if not corrected, is critical to safe operation; and, if that is the case, gives possible solutions for fixing the problem and thus allowing the equipment to continue operation. Task ID#: 8201811	***Computer Operator:** Maintain an on-line network for credit unions and Automated Teller Machines (ATM's)*—monitors the computer operations of credit unions and ATMs and is able to understand and determine when equipment is not working properly. After determining that a problem exists, the operator follows specific written procedures to determine the nature of the problem. These procedures are dependent upon the type of equipment in question. The operator follows specific procedures for correcting the problem and, if unable to resolve it, notifies a senior-level person (such as a senior operator or supervisor). Task ID#: 8201221	

Food Service Manager: *Provide preventive maintenance on the dishwasher*—ensures that the equipment is maintained weekly, including cleaning, sanitizing, and reassembling the machine. If a problem exists with the machine, the manager locates the source of the problem and conducts repairs. The manager also determines when he or she is incapable of fixing the problem and, consequently, when to contact a maintenance person. Task ID#: 8201231	***Farmer:*** *Repair silage mixers*—defines the symptom, isolates the fault, removes/replaces the broken part, aligns and adjusts as necessary, and performs operational checks. Task ID#: 8201631	
Traffic, Shipping and Receiving Clerk: *Detect and resolve computer problems*—identifies and interprets messages on the computer screen indicating that the computer is not functioning correctly; acts upon the message by correcting the error and re-entering the affected data; and asks for assistance if he or she is not able to solve the problem. Task ID#: 8201321	***Order Filler:*** *Operate a forklift and ensure that it is in proper operating condition*—recognizes and informs maintenance personnel if oil is leaking from the forklift; ensures that the battery has enough water, the forklift has enough gasoline, the electric lifts are correctly charged, the hydraulic system is used properly, the brakes and horn work, and the tires and wheels are in good condition; drives the forklift and becomes licensed which indicates that the worker has passed a specific test. Task ID#: 8202311	***Travel Agent:*** *Identify and resolve a malfunction in the operation of office equipment*—detects the faulty operation of office equipment, such as the photocopying machine; views the display window on the control panel of the photocopier to determine the nature of the problem, applying knowledge of diagnostic symbols and equipment operation; reviews the operation manual to troubleshoot the problem; removes the side panel of the photocopier to inspect internal parts, such as the guide rollers or toner container; resolves minor repair problems, such as clearing the path of guide rollers, replenishing toner container, or replenishing the paper tray; consults with equipment repair personnel for resolution of major repair problems; and performs routine preventive maintenance on office equipment. Task ID#: 8201881
Order Filler: *Fix a jam in the label maker*—shuts off the label-maker; finds and removes the jam; and restarts the machine. Task ID#: 8201961		

LOWER

Foundation Skills

F1 Reading - Locates, understands, and interprets written information in prose and documents—including manuals, graphs, and schedules—to perform tasks; learns from text by determining the main idea or essential message; identifies relevant details, facts, and specifications; infers or locates the meaning of unknown or technical vocabulary; judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.

HIGHER

***Accounting/Financial Analyst:** Read government contracts to determine and locate financial information and possible areas of exposure*—reviews the contract quickly to gain a general understanding of the content; reads the contract in detailed manner, looking at each individual part carefully; highlights possible problem areas while reading the contract; compares highlighted areas from the contract to available financial data (client files, publications, books); makes conclusions as to the contractor's performance; and rereads highlighted areas from the contract to verify conclusions. Task ID#: 7011721	***Personnel Specialist:** Read and interpret the contracts with various unions involved with the organization*—determines which of the unions having jurisdiction is involved in the personnel action contemplated; accesses the union contract on the computer and checks the index to determine which section applies to the case; reads the union contract to pick out the provisions that apply; and notifies employees, union representatives, and managers of recommended personnel actions by computer-generated memo. Task ID#: 7011701	***Construction Contractor:** Read specifications, drawings, soil reports, and other written materials in order to understand the scope of work for a construction project*—scans every page of the drawings; reads the special conditions of the specifications and the invitation to bid; performs a quantity analysis of the drawings; and reads each relevant section. The contractor also reads subcontractors' proposals and compares their scopes of work with the invitation to bid and specifications. Task ID#: 7012211
***Quality Control Inspector:** Locate a code requirement within a safety code text*—decides what code applies to the particular job, based upon the equipment's requirements (for instance, different codes apply to elevators made in different years); goes to the index of the codebook for the proper subject matter and the page number(s) of the appropriate code rule; turns to the pages and identifies the applicable rule number; reads the appropriate section of the code, interpreting the meaning and relevance of the text; uses the dictionary to understand ambiguous terms; and looks up any additional codes referred to in the initial code text or index. Task ID#: 7011811	***Graphic Designer:** Read copy submitted by client*—reads copy or a manuscript sent by the client to determine the graphic concept best suited to the job; breaks the copy down into its component parts to discover the basic objective; and examines the copy, looking for visual metaphors (graphic images which convey the underlying idea). Task ID#: 7011691	***Programming Technician:** Determine the cause of an error message*—reads an error message to determine where the problem is (i.e., the operating system or the software); locates the master index in the manuals; finds the error message in the index; looks for other terms that mean the same as the error message; finds these terms in the index; reads the section in the manual specified in the index; finds key topics in the manual and references other appropriate sections; determines the cause of the error by reading material in the manual; and fixes the program according to the manual. Task ID#: 7011821

***Dental Hygienist:** Read the patients' charts in order to understand their dental history, and read professional materials to become familiar with the newest treatments*—reads the patient's charts in order to understand his or her dental history and current condition. Further, the hygienist reads information related to the use of specific equipment and of preventive applications in patient treatment. Finally, the hygienist reads professional publications in order to become familiar with new techniques for preventing dental diseases. Task ID#: 7011331	***Travel Agent:** Read travel brochures, publications, and computer-based information to arrange travel accommodations*—accesses the computer; retrieves the menu information system; reads updated material on air fares, lodging accommodations, and specially-priced business or leisure packages; reads travel brochures and publications; obtains geographic information regarding travel locations; confers with client to advise of available accommodations; receives approval to book arrangements; prepares travel itinerary; and proofreads copy to ensure correctness. Task ID#: 7011511	***Hotel Account Executive/Sales Executive:** Qualify client accounts to company standards*—reviews a computerized client list; determines accounts requiring qualification or assessment for sound business practices and solvency; researches business directories to gain knowledge of the client's business and records notes for a client file; contacts individuals in order to gain relevant company information; records qualifying information on the appropriate form; prepares a sales or catering contract; and delivers it to the client. Task ID#: 7011471
***Truck Delivery Salesperson/Outside Sales:** Research the kinds of tools needed for mechanics by reviewing catalogs*—looks through the index in the back of the catalog; refers to the appropriate section in the catalog (e.g., brakes, front end, fuel management); finds the description/price of the tool in the catalog; and if the tool is on the truck, sells it to the customer; if the tool is not on the truck, orders the tool. Task ID#: 7011831.	***Customer Service Representative:** Read and interpret the daily "to-do" list*—reads the to-do list posted on the customer service desk; follows the instructions on the list and performs specified tasks, such as assembling fixtures, retrieving lay-a-way items, performing charge transactions, sending items out, restocking shelves, and preparing an inventory list of low merchandise, using coding instructions to ticket and stock merchandise. Task ID#: 7011451	***Childcare Aide:** Understand and interpret written messages from parents concerning a child's needs*—receives a note from a child's parents containing instructions regarding the administration of specified amounts of certain medicines to a child at given times. The aide reads, understands, and interprets the message and follows the instructions. Task ID#: 7011161
***Traffic, Shipping and Receiving Clerk:** Read the freight bill which accompanies delivered merchandise*—reads the packing slip which accompanies delivery and merchandise labels to verify the delivery of the correct number and type of product; reviews the bill to determine if the order is pre-paid or the fee is to be collected, how many copies of the order are needed, and where to distribute the copies; and inspects the bill to detect any errors such as misprints, incorrectly added items, etc. Task ID#: 7011321	***Order Filler:** Read a factory work order sheet for shipping instructions*—obtains a package and factory work order; reads the work order to obtain information on how to ship the package and the deadline for shipping; and ships the order in the prescribed manner. Task ID#: 7011961	

LOWER

F2 Writing - Communicates thoughts, ideas, information, and messages in writing; records information completely and accurately; composes and creates documents such as letters, directions, manuals, reports, proposals, graphs, flow-charts; uses language, style, organization, and format appropriate to the subject matter, purpose, and audience; includes supporting documentation and attends to level of detail; and checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.

HIGHER	***Industry Training Specialist:*** *Write training manuals to provide instruction to trainees*—researches the training topic; compiles desired visual aids; writes and produces printout of text for the training manual; cuts, arranges, and pastes text and visual aids in a desired presentation format for the training manual; photocopies, cuts, and pastes pages; and gives photocopied pages to the clerical staff for the assembly and reproduction of the training manual. Task ID#: 7021891		
	Computer Operator: *Write computer operations procedures, and memos requesting changes in procedures, to ensure that all functions operate properly*—reads and reviews previous documentation of a computer operation procedure; outlines a draft of the recommended procedure; requests assistance from other operators to proof the drafted procedure and provide suggested revisions; writes the procedure in final form; submits the procedure to supervisors for approval; and implements the procedure. Task ID#: 7021441	***Expeditor/Purchasing Agent:*** *Write concise and accurate purchase orders so they can be understood by a layperson*—completes and sends out a request for quotes for a part to be manufactured; writes a memorandum to management describing what was done, including suppliers contacted and why, how a supplier's price was evaluated, and whether the price is a good price and why; fills out various forms and documents used to obtain the approval of upper management; and writes a memorandum stating whether supplier has complied with government requirements and how the procurement meets government regulation. Task ID#: 7021681	***Personnel Specialist:*** *Write memos and other correspondence to convey information and procedures*—reviews the context of correspondence and brainstorms ways to convey a desired message; determines the purpose of a letter; researches and gathers information pertaining to the subject of the correspondence; drafts an outline of the correspondence, prioritizing items to be included; types a draft of the correspondence to express thoughts in written form; scans memos and proofreads for errors in grammar, punctuation, and clarity of content; revises memos to a final form; reprints memos; submits memos to a supervisor for approval; and sends memos to the proper destination. Task ID#: 7021501

Expeditor/Purchasing Agent: *Write management status reports*—writes reports clearly and concisely, demonstrating the appropriate use of grammar and syntax and using correct spelling. Task ID#: 7021261	***Law Enforcement Officer:*** *Prepare written reports of incidents and crimes to put into computers*—receives information from a witness, summarizes and synthesizes the information, and writes it down in chronological order. The officer proofreads the report alone or with others. After corrections are made, the officer turns in the report. Task ID#: 7021061	***Construction Contractor:*** *Prepare a letter to a sub-contractor delineating responsibilities for completion of a construction earth grading contract* after having awarded a sub-contract to a successful bidder to perform earth grading work, assesses the sub-contractor's performance and work progress. On determining that the sub-contractor is not satisfying compaction specifications, the contractor gives a verbal notification of the discrepancies. If the contractor assesses work progress and continues to find progress unsatisfactory, he/she writes a letter to the sub-contractor specifying contract requirements and the penalties for non-performance. Task ID#: 7022231
Licensed Practical Nurse: *Record the patient's activity and other observations on a variety of forms* observes the patient's behaviors and characteristics; interprets readings and activities in order to make an assessment of the cause; and uses a variety of forms to document final decisions about activities and observations. Task ID#: 7021781	***Beauty Shop Owner:*** *Establish a network of customers by writing personal notes* obtains personal information from clients who enter the salon. Following appointments, the owner writes notes of appreciation to clients, expressing pleasure in meeting them and a desire to see them again. Further, the owner indexes a client's name, services, and products for future reference. Task ID#: 7021361	
Plastic Molding Machine Operator: *Document the reasons why a machine's efficiency seems below standard* obtains and graphs machine data, noting data which are out of specified bounds. The operator then informs the machine set-up person of the problem, determines the nature of the defects, and writes any conclusions down on the back of the chart. Task ID#: 7021091		

LOWER

F3 Arithmetic - Performs basic computations; uses basic numerical concepts such as whole numbers and percentages in practical situations; makes reasonable estimates of arithmetic results without a calculator; and uses tables, graphs, diagrams, and charts to obtain or convey quantitative information.

HIGHER

Dietary Manager: *Prepare budgets and keep track of labor, food, and supply costs* assesses and forecasts the number of full- and part-time employees needed based on a census of the facility; assesses and forecasts the number of those to be served; determines needed supplies and foodstuffs based on the number and type of special diets, number of meals served, average cost, and the amount available per meal; and projects and calculates expenses and income, taking into account such factors as number of employees, possible raises, equipment rental and repair, and number of meals sold. Task ID#: 7031551	***Construction Contractor:*** *Provide cost estimates of work tasks* ascertains the parameters of the job and enumerates the tasks to be performed in a detailed breakdown of time, material, and personnel. The contractor quantifies the work items; obtains the costs of materials and equipment required for the project; and calculates the unit costs to arrive at the total project cost. Task ID#: 7032221	***Accounting/Financial Analyst:*** *Prepare the personal property tax return of a building* compiles a listing of assets (i.e., office furniture and equipment); sorts the list of assets by year of acquisition; computes the total dollar values of the assets by year of acquisition; multiplies the total dollar value by the assessment percentage provided by the county for each acquisition year and by the applicable tax rate; and adds these figures across all of the acquisition years. Task ID#: 7031841
Accounting/Financial Analyst: *Compare the current year's projections with actual expenditures to ensure consistency* obtains a printout of the current year's expenditure data from the accounting office and also obtains ancillary information relative to the account category being examined. The analyst uses this data to determine how much additional money is likely to be spent by the end of the fiscal year. Task ID#: 7031051	***Optician:*** *Measure a customer's facial features to calculate bifocal segment heights* adjusts the sample frame to fit the customer's face; measures the bifocal height and vertical depth of customer's lenses; divides the vertical depth measurement by two; adds/subtracts bifocal height to/from result of the previous step; measures the customer's pupillary distance; and compares the results with measurements of the customer's old eyeglasses to ensure accuracy. Task ID#: 7031871	

Travel Agent: *Plan a customer's vacation trip around available cash* ascertains from the customer the amount of money available, the type of vacation desired (foreign or domestic), and the type of things he or she wants to do; determines the number of people to be included in the vacation; searches for vendors that fit the needs of the customer; calls vendors to see if a trip and accommodations are available at the price; calculates the total cost of the trip, based on the price of the trip itself and the commission; invoices the trip for the customer and for accounting, using special codes to put final arrangements into the computer so that the data runs through accounting; collects money from the customer; and gives the customer a receipt, an invoice showing the details of the trip, and airline ticket(s). Task ID#: 7031761	***Excavating Equipment Operator:*** *Estimate equipment fuel consumption* estimates the amount of equipment operation time for the duration of the construction project; estimates the volume of dirt moved per hour of engine operation; and determines fuel consumption per hour of engine operation. Task ID#: 7032271	
Carpenter: *Build a wooden framework for a building to be constructed* checks foundation for "truth" of elevation, squareness, dimension, and line; measures off length of board to be used; lays out plywood to obtain correct measurement; cuts board to precise measurement; fits board in to specified position and nails in place. Task ID#: 7031751		
Farmer: *Mix feed in correct rations* adds corn, silage and minerals in the mixer in correct proportions. The farmer then sets the mixer according to the rations and operates the mixer. Task ID#: 7031631	***Farmer:*** *Keep track of medicine and feed* keeps track of quantity of medicines dispensed and pounds of feed distributed to cattle. Task ID#: 7031191	

LOWER

F5 Listening - Receives, attends to, interprets, and responds to verbal messages and other cues such as body language in ways that are appropriate to the purpose; for example, to comprehend, to learn, to critically evaluate, to appreciate, or to support the speaker.

HIGHER	***Graphic Designer:** Listen to a client during a meeting to ascertain the client's needs* listens to a client in order to gather information on the client's needs and the product to be advertised; listens to a description of relevant market trends and demographic data presented by the research department; determines how consumers will ultimately view the product; formulates advertising ideas based on the market trends and the client's needs. Task ID#: 7051211.	***Dietary Manager:** Listen and respond to staff and supervisor complaints* receives a complaint and speaks with all of the concerned parties, listening to and evaluating what has been said. The manager responds to the complaint based upon the results of these interviews and upon the agency's formal personnel policies. The dietary manager also listens to suggestions and directives from supervisors and engages in round-table discussions with all relevant parties to gather input and constructive criticism in order to positively respond to a directive or suggestion. The manager then makes operational or procedural changes in dietary management and food service based upon these discussions. Task ID#: 7051311	***Law Enforcement Officer:** Listen to a complaint from a dispute between neighbors* receives and responds to a call. Upon arriving at the scene, the officer approaches and listens to the complaints of the involved parties one at a time. The officer researches the facts behind the dispute and mediates the dispute based upon these facts. Task ID#: 7051141
	***Expeditor/Purchasing Agent:** Interview vendors to learn about their products and services* receives a request from a vendor for a meeting to discuss his or her product line; schedules and notifies the vendor of the meeting; greets the vendor upon arrival; listens to the vendor's presentation; explains the product and service needs of the organization to the vendor; listens to the vendor's explanation of the product's/service's ability to meet the needs of the organization; evaluates the information obtained from the vendor; and asks the vendor to prepare and submit a proposal based on this information. Task ID#: 7051901	***Outside Equipment Technician:** Solve a customer's service problem* listens to the inside control group's description of the problem; meets with the customer and listens to customer's description of the problem to gather additional information; looks at the communication equipment to determine the nature of the problem; works to resolve problems resulting from the communications company products or services; and helps the customer to resolve customer-based problems. Task ID#: 7051371.	***Beauty Shop Owner:** Tune in to the customers who ask for a drastic change in appearance in order to draw them out and get at their real, as opposed to expressed, needs* receives a request for services which is perceived as drastic. The owner questions the client about his or her lifestyle and listens to the responses in order to ascertain how much time the client wants to spend on daily hair maintenance. The owner also asks the client what is appealing about the requested procedure or style in order to understand the motivating force behind the request as well as its feasibility. Finally, the owner decides, from listening to the client's responses, how blunt or sensitive to be when discussing the merits of or problems associated with the chosen style. Task ID#: 7051101

***Hairstylist/Cosmetologist:** Listen to customers to gain knowledge of the services required* greets customers upon their arrival; listens to customers' responses to questions about the services required; confers with customers about methods to achieve the desired results; listens to customers' comments while being serviced; and solicits comments from a customer after completion of service to ascertain his or her level of satisfaction. Task ID#: 7051581	***Telemarketing Representative:** Make a sales call to a potential customer* calls and makes introductions to potential customer and explains the reason for the call; listens to the customer's questions and comments to uncover any needs or uses for the services or products; decides whether to pursue the call on the basis of the received information and, if the call is pursued, what products will fit the customer's needs; informs the customer what products or services, if any, will meet their needs. Task ID#: 7052331	***Customer Service Representative:** Listen to a customer to determine his or her needs* observes a customer shopping in the department; approaches and greets the customer; talks to the customer to determine his or her need for (or interest in) the merchandise; listens to the customer's response; informs the customer about the features of the merchandise; and listens to the customer's response. Task ID#: 7051921
***Order Filler:** Take telephone orders* greets a potential customer over the telephone, and identifies the name of the company and himself or herself; listens to the customer's information on desired date and time of delivery and enters this information into the computer; records the size, brand name, color, and quantity of items requested; verifies the accuracy of each item; estimates the cost for the customer; verifies the delivery date and time; asks the customer about method of payment; and, thanks the customer and terminates the conversation. Task ID#: 7052301	***Licensed Practical Nurse:** Receive information from patients for an admission database* asks the patient a structured set of questions, including personal history and present complaints; listens to responses and records responses on the form; and takes and records vital signs. Task ID#: 7051771	
***Farmer:** Follow various milking instructions* listens to instructions concerning which cows to milk and when to milk them. The farmer also listens to instructions concerning which cows to treat with medicine. Finally, the farmer listens to the sounds of the milking machines to ensure that they are in proper operating order. Task ID#: 7051151	***Excavating Equipment Operator:** Receive and understand directions from the supervisor describing daily work objectives* receives and acknowledges directions on job duties from the supervisor. The operator understands company policies regarding safety. Task ID#: 7052261	***Plastic Molding Machine Operator:** Understand a supervisor's instructions which relay the procedures for finding rejected or defective parts* receives instructions from the supervisor concerning how to spot defective parts. The operator listens to and assimilates the information and asks questions if clarification is needed. Task ID#: 7051391

LOWER

F6 Speaking - Organizes ideas and communicates oral messages appropriate to listeners and situations; participates in conversation, discussion, and group presentations; selects an appropriate medium for conveying a message; uses verbal language and other cues such as body language appropriate in style, tone, and level of complexity to the audience and the occasion; speaks clearly and communicates a message; understands and responds to listener feedback; and asks questions when needed.

HIGHER	***Industry Training Specialist:*** *Conduct classroom training to instruct employees concerning their agency's programs, procedures, job skills, generic skills, and other job-related information* assesses needs through discussions with department heads or visits to the relevant departments; conducts meetings or leads group discussions regarding the development, implementation, and evaluation of the training program; develops the training program by writing objectives, researching content; designs lessons and related materials; discusses plans and objectives with the relevant department heads; trains employees on the specified subject or skill; receives evaluations and comments regarding classroom procedures and/or objectives; and revises the training, if needed. Task ID#: 7062181	***Expeditor/Purchasing Agent:*** *Make presentations to large and varied groups (such as users, department heads)* outlines the information to be presented, organizing ideas in a logical and understandable manner. The expeditor makes visual aids, practices the presentation, ensures that the material is relevant to the audience, and tailors the delivery to the audience, as needed. Finally, the expeditor makes the presentation and responds to questions. Task ID#: 7061261	
	Food Service Manager: *Negotiate with the customer regarding the details for a proposed function; give estimates for costs, dates, and other details; and relay information to staff, supervisors, and other organizations involved* exchanges information with the client to determine the client's needs; presents a proposal for service; meets with supervisors and other staff to present proposed details and to discuss any potential problems; communicates with other organizations and vendors involved with the function in order to coordinate services and assignments; and makes follow up telephone checks to supervisors, vendors, and service organizations to make sure that goods and services are being provided, as agreed. Task ID#: 7062071	***Truck Delivery Salesperson/Outside Sales:*** *Promote a new product to an existing customer* develops a knowledge of customer needs; learns about a new product; considers its ability to meet the needs of various customers; prepares a sample of the product for customers and presents advertising material about it; shows how to use the product and how to present it on the menu; closes the sale by asking for an order. Task ID#: 7061401.	***Dietary Manager:*** *Speak to staff during meetings to communicate critical issues* prepares an agenda for the meeting; gives the agenda to a secretary for typing, reproduction, and distribution; speaks to the staff during the meeting to provide information and views regarding the agenda topics; listens to the concerns and responses of the staff regarding these topics; and discusses these topics with the staff until a resolution is reached. Task ID#: 7061861

Medical Assistant: *Explain a specific medical procedure to a patient in a way that is understandable, such as explaining how and why pulmonary function tests are used* explains to the patient what must be done to perform the test and how it must be performed; demonstrates the procedure to the patient; tells the patient to take a deep breath, ensuring that no air seeps from the mouthpiece, and blow hard into the machine; observes the patient performing the test and explains or demonstrates again if the patient is performing the procedure incorrectly. Task ID#: 7061071	***Dental Hygienist:*** *Describe treatments and provide home care instruction to a patient* describes to a patient the recommended or necessary dental treatment; instructs the patient on home care verbally and by demonstration; and describes findings of patient exams to the dentist. Task ID#: 7062031	***Outside Equipment Technician:*** *Meet with high level corporate executives and local telephone personnel to discuss moving equipment from one location to another* sets up a meeting with the executive(s) and discusses decisions and problems concerning the move. The technician then meets with the local telephone company personnel to explain what is needed to have the job done in an expeditious way. Task ID#: 7061431
Traffic, Shipping and Receiving Clerk: *Converse with a variety of individuals to facilitate all aspects of the work process* requests credentials from the truck driver to ensure that documents are in order; directs the carrier to the appropriate receiving dock; explains any problems which may have been encountered to the dock supervisor; requests assistance when the situation requires the approval of a higher authority; informs the proper authority of outgoing shipments and requests a signature and approval of the action; and converses with shipping and receiving area workers and line stockers to elicit assistance in moving materials to their destinations and in locating needed parts. Task ID#: 7061531		
Waiter/Waitress: *Greet a table and establish an understanding with the customer*—greets the table and introduces himself or herself; explains what is being offered (e.g., specials, buffet, options); asks customers if they are ready to order; if not, allows for more time; suggests items or options; and takes orders when customers are ready. Task ID#: 7062011		

LOWER

F7 Creative Thinking - Uses imagination freely, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.

HIGHER	***Graphic Designer:** Develop design ideas from scratch*—determines the client's basic need and develops a concept which lends itself to advertising. Basically, the designer views the concept from many different viewpoints and tries to offer an innovative interpretation that is intriguing, attractive, and exciting. The designer also develops ideas that exhibit contrast or incongruity. Ultimately, the designer generates and refines a final idea. Task ID#: 7071211		
	***Hotel Account Executive/Sales Executive:** Offer a creative alternative to a customer who wants a service in order to set the hotel's product apart from that of others*—identifies what the customer wants; generates unusual ways of giving the customer what he/she requests (e.g., a different kind of reception); offers additional services to cater to the customer's needs in order to spark his or her interest and highlight the uniqueness of the hotel. Task ID#: 7071081	***Dietary Manager:** Evaluate different procedures in order to develop more efficient or economical methods of operation*—reviews and streamlines a variety of procedures, screening a variety of sources (e.g., trade publications) to identify potential changes or to generate ideas. Also, the dietary manager has staff meetings and roundtable discussions to develop teamwork and generate new ideas. Task ID#: 7071031	***Childcare Aide:** Use creative thinking when planning lessons*—decides upon the content of the week's lesson plans. The aide generates new ideas for presenting standard themes to stimulate the children. For instance, if the children are studying farms, the aide may research whether the school can bring in a farm animal for display. If existing plans change suddenly due to unforeseen circumstances such as weather, the aide must generate new ideas to replace the existing plans. Other creative ideas generated by the aide may include planning different room arrangements to interest the children, such as a kitchen or grocery store, and planning field trips and special day activities. Task ID#: 7071241

Hairstylist/Cosmetologist: *Create a style or cut or suggest a service that will best suit the customer's features*—studies the customer's hair, including its length, thickness, texture, color, and previous style; studies the customer's facial structure to determine the cut or color that will best complement that structure; and trims, styles, or cuts the customer's hair according to his or her request, using creative lines and following the customer's hair pattern. Task ID#: 7072161		
Farmer: *Transform ideas and requirements into actual products*—recognizes the need to design a cattle rack. The farmer views a factory unit in order to facilitate the design of the rack. He/she then designs the unit, welds and cuts parts to create the final product. Task ID#: 7071121		
Telemarketing Representative: *Assess the best way to convince a customer to buy a product*—listens to what the customer is saying and how it is being said before deciding how to introduce the product. The representative may alter the words in a ready-made product script in order to make the customer comfortable with the presentation. Task ID#: 7071601		

LOWER

F8 Decision Making - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.

HIGHER			
	Excavating Equipment Operator: *Determine what kind (size) of equipment to use for the project*—determines the distance that materials will be hauled and the hourly cost of equipment operation, based on factors such as quantity of material to be excavated, fuel consumption, and maintenance requirements. The operator evaluates the labor costs, work hours, regular time, overtime, and potential weather delays; determines the availability of skilled workers to operate specific equipment; and assigns equipment that is capable of satisfying all project requirements. Task ID#: 7082271	***Food Service Manager:*** *Choose a vendor based upon the quality and value of the food and beverage items offered*—contacts vendors of a particular food or beverage item to obtain price quotes; compares the prices quotes and decides upon the best vendor in terms of price and product quality; compares prices quoted to current market value; and decides to which vendor the contract should be awarded. Task ID#: 7082151	***Dietary Manager:*** *Decide upon the contents of various required menus (e.g., breakfast, lunch, dinner, and special functions)*—reviews requests for menu changes and determines if there is a need to change. The determination is based on such information as type of group to be served, type of service requested, number in group, and any special instructions. Afterwards, the manager selects food to be served, determines how food is to be served; and discusses food-related decisions with the cook. The manager contacts vendors to ascertain if food selections can be delivered when requested; orders food from vendors who can accommodate the manager's needs; contacts additional vendors if selections are not available or vendors are unable to deliver when requested; and changes menus if selected foods are not available when requested. Task ID#: 7081551

Expeditor/Purchasing Agent: *Decide what supplier to use during a bid evaluation based on the supplier information stored in the computer*—retrieves information stored in the computer regarding suppliers that have placed a bid; looks at their past performance; and determines which supplier makes the most reliable part at the best price. Task ID#: 7081681	***Blue Collar Worker Supervisor:*** *Prioritize the order of processing to resolve a conflict in scheduling*—recognizes a conflict between the daily processing schedule and on demand processing requests; becomes familiar with the processing schedule and equipment utilization for the entire area; decides which process should be run first, applying knowledge of the processing priorities; gives verbal order to processing equipment operator; and notifies the planning and scheduling department of the change in scheduling of processing. Task ID#: 7081911	***Hairstylist/Cosmetologist:*** *Offer the customer alternatives to a requested cut or style, taking into account the desired style and qualities of the customer's hair*—analyzes the condition of the customer's hair, assesses whether the existing condition would be appropriate for the requested service, and decides whether or not the requested additional perming or color treatment is feasible. He or she may decide that long-term reconditioning is best for the hair. Next, the cosmetologist evaluates both the texture of the hair and the shape of the face, head, and body in order to suggest the most appropriate cut and style for the customer. He or she offers the customer alternatives, and negotiates to agree upon the most acceptable hair cut and style. Task ID#: 7081281
Telemarketing Representative: *Make decisions concerning a customer's product or service needs*—gathers information about a customer to help uncover a potential need; makes suggestions to a customer based upon the obtained information; and offers the product which is best suited to the customer. Task ID#: 7082321	***Quality Control Inspector:*** *Make a visual inspection of equipment and decide whether it meets code requirements*—visually inspects the boiler or pressure vessel; collects pertinent information to decide whether the equipment meets the code; determines whether or not a violation has occurred; and refers to the codebook to verify the decision. Task ID#: 7081591	
Waiter/Waitress: *Decide on which table to serve first if customers are seated at two tables at the same time*—realizes customers are being seated at two tables at the same time; observes and evaluates which guests need service more promptly; tells the guests at the other table that they will be served very shortly; and services the table chosen for initial service. Task ID#: 7082091	***Plastic Molding Machine Operator:*** *Decide upon the quality of a plastic part*—visually inspects the finished plastic part. The inspection is based upon previous instructions or knowledge concerning the characteristics of good and bad parts. As a result of this inspection, the operator determines whether the part is good or defective. If the part is deemed defective, the operator decides upon one of two courses of action: place the part into a reject box or consult with the supervisor about action to be taken. Task ID#: 7081391	

LOWER

F9 Problem Solving - Recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be); identifies possible reasons for the discrepancy, devises and implements a plan of action to resolve it; evaluates and monitors progress; and revises plan as indicated by findings.

HIGHER	***Dietary Manager:*** *Devise a method of feeding more patients or clients than are budgeted for or can be accommodated*—consults with the staff regarding possible solutions to the problem; speaks to vendors and reviews industry guides and manufacturers' brochures to identify equipment available to resolve the problem; meets with administrators to convince them to lease new equipment for a specific period; negotiates with vendors to obtain a lease agreement to test new equipment; retrofits new with existing equipment; tests a new system to ensure that it functions as planned; and documents results and submits them to management. Task ID#: 7091861	***Blue Collar Worker Supervisor:*** *Resolve problems in the manufacture of a product to ensure that sequential operations are completed in a timely manner*—recognizes that a problem exists in the sequence of manufacturing a product which is delaying the overall operation and analyzes possible reasons for the problem; reviews alternative methods to streamline operations, such as shifting personnel to different work tasks or replacing equipment; selects the most appropriate method and implements the change; and trains the staff in the new job task or new equipment operation. Task ID# 7091521.	***Programming Technician:*** *Make a program run more quickly*—documents how long it takes to run the program without modification (i.e., sets up a baseline); identifies how the program's input affects running time; determines if input can be modified to make the program run more efficiently; isolates the portion of the program that is most time consuming; rewrites that portion; reruns the program and compares the new run time with the baseline run time; and if reduction in run time is not sufficient, rewrites the program. Task ID#: 7091821
	Dietary Manager: *Identify a nutrition standard not being met and determine a plan to meet it*—reviews the nutrition standard to ensure that quality assurance procedures are followed and reviews current data to identify specific deficiencies. The manager reviews the results with the dietitian staff, uses staff recommendations to develop a plan to correct nutritional deficiencies, and conducts necessary in-service training for staff to implement the plan. Based on a follow up review to check for compliance with the standard and to document findings, the manager reports the results to quality assurance staff in a timely manner. Task ID#: 7091461	***Construction Contractor:*** *Analyze and correct the problem when timber piles break before reaching the specified bearing*—evaluates and selects the appropriate equipment to accomplish the project and chooses the right kind of timber pilings based on the strength, size (diameter), and cost to meet project specifications. When timbers break during the piling operation, the contractor analyzes how and why this is occurring and reassesses the strength of the materials, the equipment specifications, and the personnel skills. Determining the cause of failure, the contractor chooses the most economical way to correct the problem. Task ID#: 7092231	***Beauty Shop Owner:*** *Notice when income slips and does not meet expenses, and take appropriate actions*—performs regular business practices, such as assessing employee performance relative to rate of payment. As a result of these practices, the owner notices that income is insufficient to meet expenses. The owner assesses potential reasons for the problem and generates a plausible reason for the discrepancy. (e.g., Are there too many employees for the client base? Are there not enough clients to pay the bills?) The owner takes action to deal with the situation, in this case by either making adjustments in clientele or employee number. He or she continues to monitor progress to see whether the income/expense discrepancy levels. Finally, the owner recognizes when to solicit outside help in order to deal with a particular difficulty. Task ID#: 7091421

Truck Delivery Salesperson/Outside Sales: *Collect money from customers*—discusses with a customer his or her failure to pay; determines the reason for non-payment (e.g., extenuating circumstances); determines the appropriate course of action depending on the cause of non-payment and the reputation of the customer; converts the customer's payment plan according to the customer's ability to pay (e.g., has the customer billed by the company); has the customer complete a credit application; and submits the application to the company. Task ID#: 7091831	***Hotel Account Executive/Sales Executive:*** *Solve problems related to group hotel services*—arranges for additional rooms if the number of arriving guests is larger than the number of reservations booked; adjusts times and dates when guests change their minds about a planned function; sorts out meeting rooms when they have been double-booked; moves guests when they are dissatisfied with their room assignments; and provides extra services not usually included in the package when requested by guests. Task ID#: 7091731	***Travel Agent:*** *Compensate a customer who is dissatisfied with his or her travel experience*—talks with the customer to determine the nature of the problem; reviews the customer's file to identify the party or travel service provider at fault; contacts a representative from the company at fault to notify them of the customer's complaint; negotiates compensation for the customer with a company representative; and notifies the customer of the compensation offer. Task ID#: 7091881
Food Service Manager: *Ensure that all work is done on time in the case of a scheduled employee calling in sick*—receives a call that a scheduled worker will be absent from work and decides how best to replace the worker. Some options that can be considered by the food service manager include: calling another worker to see if that worker can come in early; switching the positions of existing workers, such as having the baker help with cooking if the dessert is pre-done; and coming in earlier to perform the duties of the absent worker, if another worker is not available. Task ID#: 7091231	***Order Filler:*** *Handle customer complaints*—listens to the customer's complaints and concerns and records these on paper, retrieves his or her order in the computer, and reviews it with the customer; pinpoints the cause of the problem and assures the customer that it will be corrected; if the wrong item(s) has been sent, credits the customer's account and allows him or her to keep the item(s); and tries to identify any internal causes for the problem. Task ID#: 7092301	***Customer Service Representative:*** *Deal with a customer's problem, such as his or her computer not working because it does not have enough memory*—listens to the problem and diagnoses it as not enough memory in the computer. The representative then writes up an order on the appropriate form, keys the order into the customer's file in the computer database, and notifies the sales department of the order. Task ID#: 7092131

LOWER

F10 Seeing Things in the Mind's Eye - Organizes and processes symbols, pictures, graphs, objects or other information; for example, sees a building from a blueprint; a system's operation from schematics; the flow of work activities from narrative descriptions; or the taste of food from reading a recipe.

HIGHER	***Carpenter:*** *Visualize a three-dimensional building or structure from a one-dimensional blueprint*—studies the blueprint of the project structure; looks over the structure's building site; determines how the completed structure will appear on site; visualizes the materials needed for finishing the project or the part of the project that has been assigned; and decides what tools will be needed to begin and complete the project. Task ID#: 7102081	***Construction Contractor:*** *Visualize the final construction project from a preliminary outline*—obtains and evaluates the description of the project verbally or in a rough draft. Mentally, the contractor organizes the elements of the project (e.g., height, weight, strength, durability); constructs and combines the elements in a time sequence for the finished job; and reviews all the elements for construction feasibility. Task ID#: 7102221	***Graphic Designer:*** *Visualize the finished product from unrelated parts, such as the manuscript, graphics supplied by the client, graphics taken from files, sketches, or photographs*—reviews the manuscript to develop a graphics concept; assembles graphic materials to test various approaches to the finished product; tests various graphics concepts in conjunction with the manuscript; and decides which concept best conveys the desired idea or information. Task ID#: 7101691
	Beauty Shop Owner: *Visualize the finished product of a requested hairstyle in order to see if it will be flattering*—looks at the person's face shape and body mass as well as at the requested style, and visualizes how the cut would look in relation to the customer's whole body. The owner also visualizes the shape of the style and what it would look like. Finally, the beauty shop owner visualizes how the cut would look independent of the customer and visualizes how to perform the cut in order to make the style happen. Task ID#: 7101101	***Excavating Equipment Operator:*** *Foresee the final results of the dirt moving activity before actually starting to move the dirt*—reads blueprints or drawings, and relies on previous training and experience to mentally picture the activity and outcome. The operator evaluates safety considerations in performing the work, and observes and consults with co-workers to obtain a clear picture of the project. Task ID#: 7102251	

Plastic Molding Machine Operator: *Interpret and apply workmanship criteria to product output*—reviews the workmanship chart, looking at its pictorial definitions. The operator interprets and compares the pictorial representations to the product information and determines the relationship between the criteria and the product. Task ID#: 7101111	***Quality Control Inspector:*** *Read building blueprints to identify fire protection systems*—obtains and examines a blueprint showing the specific locations of fire protection equipment, using the symbols found in the blueprint's key. Task ID#: 7101801	
Dental Hygienist: *Take and interpret radiographs in order to assess the condition of a patient's teeth*—takes radiographs of the teeth to assist in periodontal care and to observe the condition of the area below the gum line. Task ID#: 7101331		

LOWER

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F13 Responsibility - Exerts a high level of effort and perseverance toward goal attainment; works hard to become excellent at doing tasks by setting high standards, paying attention to details, working well and displaying a high level of concentration even when assigned an unpleasant task; and displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing tasks.

HIGHER	***Food Service Manager:*** *Assume responsibility for running the food service operation*—makes a commitment to the job that supersedes other needs; gives up personal plans to work extended hours for special events; determines a priority hierarchy for simultaneously scheduled events; and personally handles top priority events while delegating the remaining events to other workers. Task ID# 7131231.	***Dietary Manager:*** *Ensure that the patient load of 360 is adequately fed during merger of establishment with another hospital*—dresses in expendable clothing to assist food service personnel; performs duties of food service personnel (washes dishes, cooks food, and passes trays); and works 16 to 17 hours a day, 7 days a week for several weeks. Task ID#: 7131861	***Carpenter:*** *Fulfill building commitments on time and at contracted expenses*—reviews the building plans (before starting) with the contractor and determines the accuracy of the original contract date and cost; keeps the contractor informed about any changes in time or expenses with the project; sets personal daily, weekly, or other short-term goals, and helps other workers to do the same to reach the overall project goals; and works extra hours, as needed, to meet these goals. Task ID#: 7132081
	Expeditor/Purchasing Agent: *Review all work thoroughly when soliciting bids, evaluating suppliers, and writing purchase orders so that everything is of high standards and contains no mistakes that will cause a disaster later*—writes the purchase order to conform to rules and regulations and, using reference manuals, rechecks it to make sure nothing has been omitted. Once the purchase order is placed, the expeditor/purchasing agent checks to see that the parts are being made according to the blueprint and telephones supplier periodically to make sure that the person responsible for keeping things on schedule is doing so. Task ID#: 7131681	***Childcare Aide:*** *Exhibit high levels of commitment to job, children, and parents in line with the rules and regulations of the facility and the government*—arrives at work on time. The aide employs formal training and experience in childcare to determine a child's needs and to meet these needs. The aide takes steps to ensure that the children under his or her charge receive social, physical, and emotional care in a safe environment. Finally, the aide shares the details of the child's day with the parents. These actions help to increase parents' confidence in the worker's ability to care for the child and builds a better working relationship between the parents and the aide. Task ID#: 7131161	***Food Service Manager:*** *Recognize and accept the food service task at hand and determine the most efficient method for accomplishing the task*—delegates various tasks to make sure that the function is well covered; sets high standards of performance for workers and subordinate supervisors and follows up to make sure that standards are met; does not overlook any detail in covering the function; and attends food service functions to make sure that all goes as planned and to give the client and the school administrator assurances about the success of the function. As employees exhibit success in performing their tasks, the food service manager shows increased trust in them by giving them increased responsibility. The manager also tries to keep a happy work atmosphere at most functions so that workers enjoy the work time and begin to feel responsibility toward the job and the organization. Task ID#: 7132071

Waiter/Waitress: *Wait on tables so as to ensure customer satisfaction*—arrives at work on time and is prepared when scheduled; checks station for details that need to be completed before customers arrive; checks with other staff to see if anything needs to be done; checks for changes in the menu and the specials; communicates any changes to other servers; professionally serves customers based on their needs; and ensures that the restaurant is clean and properly prepared for the next shift. Task ID#: 71322011.	***Quality Control Inspector:*** *Perform the job thoroughly and independently*—realizes that no one will be constantly available to supervise, and takes it upon himself or herself to perform a job without constant monitoring. The inspector acts responsibly by doing the necessary research to perform the job honestly and completely. Task ID#: 7131621	***Computer Operator:*** *Assume responsibility for the arrangement and completeness of jobs run on the mainframe computer*—checks programs to make sure that they are complete and that relevant forms provide needed output; makes required entries into the operations log to document programs run on the mainframe; checks with customers on discrepancies that appear during the program run; makes sure that all security requirements are adhered to and enforced during all program runs; and monitors and records all mainframe use during the shift. Task ID#: 7131741
Traffic, Shipping and Receiving Clerk: *Store materials and parts in a safe and secure area*—places material in a safe and secure place until pick up or shipment in order to prevent damage or loss, and locates and transports requested parts in a timely manner in order to prevent operations from stopping or slowing down. Task ID#: 7131531	***Order Filler:*** *Ensure that the correct material is loaded on the truck*—verifies the items on the truck against those listed on the order form; loads the materials onto the truck; and supplies the truck drivers with the accompanying paperwork. The order filler also ensures that hazardous material forms are supplied to relevant customers, that copies of such forms are placed in the file and that customers are satisfied with the service received. Task ID#: 7132311	***Waiter/Waitress:*** *Ensure that the work schedule is followed*—determines his or her appropriate shift for the week; coordinates with the shift supervisor to keep him or her informed of any changes; finds suitable replacement if unable to come to work; and arrives to work well-groomed, prepared, and on time for scheduled shifts. Task ID#: 7131981
Telemarketing Representative: *Deal with customers' inquiries promptly*—listens to what a customer is saying (e.g., the paper is not arriving on time); decides what can be done to assist the customer by consulting with customer service (e.g., monitor delivery of the paper); and initiates the recommended action immediately. Task ID#: 7131601	***Computer Operator:*** *Display punctuality and good attendance at work*—takes responsibility for coming to work on time and when scheduled. The operator also takes responsibility for work to be done within a specified time frame. Task ID#: 7131221	***Farmer:*** *Take responsibility for accomplishing work assignments*—ensures that work assignments are accomplished correctly and on time, such as by ensuring that the cattle count is correct. Task ID#: 7131191

LOWER

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F15 Social - Demonstrates understanding, friendliness, adaptability, empathy and politeness in new and on-going group settings; asserts self in familiar and unfamiliar social situations; relates well to others; responds appropriately as the situation requires; and takes an interest in what others say and do.

HIGHER

Licensed Practical Nurse: Deal politely with family members of a very sick patient—receives frequent telephone calls from family members requesting information; responds politely and empathetically to all inquiries; instructs family members on maintenance of the patient at home (i.e., how to maintain tubes, change dressings); and understands family members' needs and offers family referral options if it is felt that they are needed (nursing home, social workers, etc.). Task ID#: 7151771	*Hotel Account Executive/Sales Executive: Relate to guests, visitors, and co-workers in the hotel*—meets incoming group at the door, welcomes them to the hotel, and introduces self as person to contact for help; determines needs of group and what facilities will be needed to make them comfortable; makes presentations to various groups to sell hotel services; attends meetings of professional societies to maintain professional contacts; and entertains prospective customers, including giving tours of the hotel. Task ID#: 7151731	*Medical Assistant: Deal with a patient who has received a negative test report from a physician*—listens to and empathizes with the patient as he or she shares the problem and assists the patient in understanding the problem, including answering questions, urging the patient to call with any additional concerns, and assuring the patient of the availability of help. The assistant also sets up appointments for the patient with surgeons, visiting nurses, or agencies that can be helpful to the patient. Task ID#: 7151541
Hairstylist/Cosmetologist: Demonstrate understanding, friendliness, empathy, and politeness toward clients—listens intently to a customer's conversation to gain the customer's confidence and to learn more about the customer; asserts self to recommend ideas to the customer about possible hair styles and beauty treatments; learns as much as possible about the customer during the customer's visit to the salon; shows friendliness toward the customer; assumes the customer is usually right in decisions unless the customer's ideas are too "extreme" to be practical, then presents more practical alternatives to the customer for consideration. Task ID#: 7152021.	*Telemarketing Representative: Be personable when dealing with customers*—talks with customers in a way that makes them feel that the representative is their friend. He or she shows sensitivity to their everyday circumstances, speaks with them politely and empathetically, and presents information sincerely. Task ID#: 7151611	*Hotel Account Executive/Sales Executive: Assert oneself and network with people at conventions in order to obtain hotel business*—asserts him/her self in social situations; joins conversations that reflect a shared interest; and listens and chooses appropriate words and their timing. Task ID#: 7151081

***Optician:** Respond appropriately to customer requests, demonstrate understanding of the customers' needs, and exhibit friendliness and politeness to customers*—greets customers in a friendly way; listens to customers' ideas, concerns, and desires; recommends ideas to customers to gain their confidence and to let them know of the optician's knowledge of products and services; demonstrates genuine concern for customers' problems by listening and quickly responding to customer requests; and expedites paperwork or implements other actions immediately. Task ID#: 7152051	***Telemarketing Representative:** Display a sense of concern and interest in the customer's business and company*—asks questions about the customer's company and about the contact person's position in the company to become familiar with the potential customer and to show interest above and beyond merely obtaining a sale; makes general ice-breaking conversation in order to befriend the contact person and facilitate a sale. Task ID#: 7152331	
***Waiter/Waitress:** Greet and establish rapport with the customers*—welcomes the customers to the table with a glass of water and a nice smile; issues an appropriate and friendly greeting based on his or her impression of the customers; and establishes a positive relationship with the customers. Task ID#: 7151981	***Order Filler:** Ensure the comfort of new employees*—interacts in a friendly manner and makes the new employee feel comfortable; offers assistance, if needed; and trains the employee on the use of the computer and on questions to ask customers to pinpoint the details of an order. Task ID#: 7152301	

LOWER

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F16 Self-Management - Assesses own knowledge, skills, and abilities accurately; sets well-defined and realistic personal goals; monitors progress toward goal attainment and motivates self through goal achievement; exhibits self-control and responds to feedback unemotionally and non-defensively; and is a "self-starter."

HIGHER	***Truck Delivery Salesperson/Outside Sales:*** *Establish and achieve a yearly sales goal that exceeds the past year's sales*—analyzes the existing territory and the nature of current customer sales and targets expansion opportunities. After determining the new yearly goal, the salesperson breaks it down into subgoals (by the week, the day, and the customer) and plans how to achieve these goals step by step. The individual assesses progress at routine intervals and continues to analyze the route for new sales opportunities. Task ID#: 7161401	***Programming Technician:*** *Plan for promotion/career advancement*—reviews job descriptions at higher levels to determine the skills needed; defines shortcomings (skills not possessed); plans the education necessary to acquire the skills; does activities of the higher-level job and documents these activities; presents a list of the completed activities to the supervisor at performance appraisal; discusses future goals with the supervisor; and arranges for periodic review of goal attainment. Task ID#: 7161851	
	Accounting/Financial Analyst: *Prepare a major forecast with limited information, such as only one notice from the supervisor, and that notice arriving only three months before the forecast due date*—receives the initial assignment and directions and obtains the necessary information and due date. The analyst searches for elusive information from a variety of sources, develops necessary computations, reviews his or her own progress near the end of the work period, and prepares a final presentation of the forecast. Task ID#: 7161051	***Graphic Designer:*** *Assess one's own attributes accurately, set realistic goals, and exhibit self-control by responding to feedback*—assesses the work to be done over a specified period of time; sets realistic goals for accomplishing the work; demonstrates self-control when customers disagree with his or her ideas; and revises time schedules to allow for reworking projects. Task ID#: 7162041	

Travel Agent: *Make arrangements for regular customers in addition to working with new customers*—keeps a file of repeat customers and telephones them during slow periods to see if they are planning any trips; makes arrangements for customers to come in, or handles as much of the arrangements as possible over the telephone so that a work-up can be ready when the customer arrives at the agency; makes arrangements for new customers and gives them quality service while handling old customers; completes paperwork for customers and a company in a timely manner to avoid wasting the customer's time and to ensure that the company and its agent get paid. Task ID#: 7161761		
Waiter/Waitress: *Create an atmosphere in which to effectively perform the job*—presents himself or herself well-groomed and with proper hygiene; checks the surroundings (tables, work area) to see if they are presentable; checks to see if co-workers are together as a unit; organizes self and surroundings with proper tools to fulfill required tasks; prepares self mentally to handle customers; and presents and maintains professional composure throughout the day. Task ID#: 7162011		

LOWER

Chapter 3

Ratings and Illustrative Tasks for 35 Jobs

Chapter 3. Ratings and Illustrative Tasks for 35 Jobs

INTRODUCTION

This chapter lists the task descriptions collected from the sample of 35 jobs studied in Phase 2 of the job analysis. It also contains information about the importance of the competency and foundation skills required for these jobs. These data are based on 142 interviews (from three to five interviewees for each job). The interviewees were job incumbents, supervisors, and trainers. Each interviewee used a five-point rating scale ranging from 1 (extremely low) to 5 (extremely high) to describe the importance of each competency and skill for his or her job.

Three major pieces of information are provided in this chapter:

(1) ratings of the importance of each competency (Table 3-1) and foundation skill (Table 3-2)—across all interviewees, regardless of their jobs,

(2) competency and foundation skill criticality for each of the 35 Phase 2 jobs, and

(3) illustrative tasks that describe ways the skills and competencies apply to the specific jobs.

Tables 3-1 (the competencies) and 3-2 (the foundations) present the means and standard deviations of the ratings, computed across all interviewees for all jobs. These means are the average level of criticality for the SCANS skills. Note that the importance of the competencies vary from a mean criticality of 4.24 for "participates as a member of a team" to a mean of 2.21 for "allocates money," and the importance of the foundations vary from a mean criticality of 4.71 for "responsibility" to a mean of 2.75 for "mathematics." The reader should also note that criticality ratings vary among interviewees, as indicated by the size of the standard deviations. The larger the standard deviation is for a competency or foundation, the more the importance of the skill varies across jobs. For example, the standard deviation of 1.70 for "uses computers to process information" indicates that this skill is very important for some jobs, and is hardly used in others. Keep in mind that these data only pertain to the 35 jobs surveyed in this chapter; use of a larger, different sample of jobs might show different mean criticality ratings.

Information is then provided for each job, with jobs grouped by the five sectors of the economy shown in Table 2 in Chapter 1. For each job, a brief general description is given. Next, the mean and standard deviations of the competencies and foundations are shown for that job. These are ordered by mean (average) value, giving an indication of which skills are the most important for the job. Following these data, illustrative tasks are provided that demonstrate the use of some of the skills. Following each task description is a Task ID number—a code to the interview in which the description was obtained.

Table 3-1. Means and Standard Deviations of Ratings for All Jobs in Phase 2: Competencies (Based on 142 Interviews)

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	4.24	.94
C01	Allocates Time	4.19	.96
C11	Serves Clients/Customers	4.15	1.34
C07	Interprets and Communicates Information	4.00	1.15
C15	Understands Systems	3.77	1.10
C14	Works with Cultural Diversity	3.72	1.21
C10	Teaches Others	3.67	1.19
C12	Exercises Leadership	3.63	1.18
C06	Organizes and Maintains Information	3.61	1.25
C05	Acquires and Evaluates Information	3.59	1.24
C13	Negotiates to Arrive at a Decision	3.39	1.21
C16	Monitors and Corrects Performance	3.35	1.19
C19	Applies Technology to Task	3.35	1.46
C17	Improves and Designs Systems	3.11	1.31
C08	Uses Computers to Process Information	3.00	1.70
C18	Selects Technology	2.89	1.45
C03	Allocates Material and Facility Resources	2.82	1.32
C04	Allocates Human Resources	2.82	1.48
C20	Maintains and Troubleshoots Technology	2.70	1.45
C02	Allocates Money	2.21	1.37

Table 3-2. Means and Standard Deviations of Ratings for All Jobs in Phase 2: Foundation Skills (Based on 142 Interviews)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	4.71	.51
F17	Integrity/Honesty	4.61	.63
F05	Listening	4.61	.64
F06	Speaking	4.33	.86
F01	Reading	4.32	.88
F09	Problem Solving	4.20	.92
F15	Social	4.17	.82
F16	Self-Management	4.12	.85
F14	Self-Esteem	4.11	.82
F11	Knowing How to Learn	4.01	.92
F08	Decision Making	4.01	1.01
F02	Writing	3.87	1.14
F12	Reasoning	3.87	.94
F03	Arithmetic	3.61	1.18
F07	Creative Thinking	3.40	1.12
F10	Seeing Things in the Mind's Eye	3.26	1.24
F04	Mathematics	2.75	1.26

Health and Human Services

Childcare Aide (Based on Four Interviews)

The role of the childcare aide differs depending upon the work setting. In a center, the aide works under the supervision of a director who is responsible for administrative and program development activities. The self-employed worker would be responsible for all categories of activities on a smaller scale. Childcare aides are responsible for the overall health, nutrition, and social welfare of the children. Staff working with infants and toddlers have basic routines to follow. Older pre-school children require a more varied program that will also stimulate physical and social growth.

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	5.00	.00
C15	Understands Systems	4.50	.58
C01	Allocates Time	4.50	1.00
C07	Interprets and Communicates Information	4.25	.96
C06	Organizes and Maintains Information	4.25	.96
C05	Acquires and Evaluates Information	4.25	1.50
C04	Allocates Human Resources	4.00	.82
C10	Teaches Others	4.00	.82
C13	Negotiates to Arrive at a Decision	4.00	.82
C16	Monitors and Corrects Performance	3.75	.96
C17	Improves and Designs Systems	3.75	.96
C11	Serves Clients/Customers	3.75	1.89
C14	Works with Cultural Diversity	3.50	1.29
C03	Allocates Material and Facility Resources	2.50	1.29
C20	Maintains and Troubleshoots Technology	2.25	1.89
C18	Selects Technology	2.25	1.89
C19	Applies Technology to Task	2.25	1.89
C02	Allocates Money	2.00	1.41
C08	Uses Computers to Process Information	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	5.00	.00
F13	Responsibility	4.75	.50
F17	Integrity/Honesty	4.50	1.00
F11	Knowing How to Learn	4.50	1.00
F06	Speaking	4.50	.58
F15	Social	4.50	.58
F14	Self-Esteem	4.50	.58
F16	Self-Management	4.50	.58
F09	Problem Solving	4.50	.58
F07	Creative Thinking	4.25	.50
F02	Writing	4.25	.96
F01	Reading	4.25	1.50
F12	Reasoning	4.00	.82
F08	Decision Making	3.75	.96
F03	Arithmetic	3.50	1.73
F10	Seeing Things in the Mind's Eye	2.75	.96
F04	Mathematics	2.25	1.89

Job: Childcare Aide

Allocates Time (C01)

Available at any time for the children's needs. To perform this task, the childcare aide is on time every morning to watch the children; runs each activity or project on time, and is flexible if the activity is running late. Task ID#: 8012141.

Manage time so that the needs of children are met in a proper childcare environment. To perform this task, the childcare aide folds sheets, washes bottles, and cleans the room when the children are playing and occupied, and, when the children are asleep, completes reports and examines records to ensure that they are complete; meets a child's needs when the child is crying, such as changing a diaper when it is wet and feeding the child when he or she is hungry; and completes all tasks so he or she can talk to the parent regarding their child at the end of the day. Task ID#: 8011661

Plan daily activities. To perform the task, the childcare aide gathers the supplies needed for the next day's discovery areas; sets times for activities such as lunch, snacks, and naps; and budgets time around these pre-set times for activities such as workbooks and discovery areas. Regardless of the schedule, the aide flexibly responds to the children's needs. Finally, the aide plans the performance of such activities as sanitizing toys and cleaning the bathrooms during the children's nap times. Task ID#: 8011241

Allocates Human Resources (C04)

Assess the development of children's physical, emotional, social and intellectual abilities. To perform the task, the childcare aide observes children in both learning and social environments and assesses their progress in comparison to age-appropriate expectations and the progress of peers. The aide keeps written records of progress and of deficiencies in academic, social, and physical skills. Task ID#: 8041161

Organizes and Maintains Information (C06)

Compile accurate written records, including accounts of all facets of the child's day, for the office and the parents. To perform this task, the childcare aide records feeding times, including how much and what was fed to the child; records naps taken by the child, noting start and finish times of naps; administers medication and notes dosage, time, and date, and signs appropriate form; compiles a list of supplies needed by the child and gives this list to the parent when the parent picks up the child; and keeps general notes and evaluations of the child's day to relate to parents. Task ID#: 8061661

Interprets and Communicates Information (C07)

Receive and act upon monthly teaching goals distributed by corporate headquarters. To perform the task, the childcare aide receives a set of written monthly goals. The aide acts upon these goals, for instance introducing the theme of "safety" to the children by planning appropriate activities. Activities such as games, videotapes, puppets, lessons on the use of the telephone, and instruction on why not to talk with strangers may be introduced to implement the specified goal(s). Task ID#: 8061241

Analyze information and communicate the results and recommendations to a variety of individuals, including parents, co-workers, the head teacher, administrators, and in some cases health care personnel. To perform the task, the childcare aide observes a specific situation, such as a child's special potential in a particular academic or physical area; or detects a potential physical plant hazard, such as the need for handrails at the site of steep steps. The aide may also analyze a child's test results or artwork in order to detect proficiencies or problems. The aide interprets the information obtained from the above-mentioned observations and communicates it verbally or in written form to the appropriate audience(s). Task ID#: 8071161

Maintain a diplomatic relationship with parents and co-workers and modify communications as necessitated by changes in the emotional level of specific situations involving the children. To perform the task, the childcare aide is careful to communicate ideas or performance concerning a given child to the parent in a sensitive manner, thus allowing the aide to better serve the developmental needs of the children. The aide also takes care that such communications be as positive as possible and is quick to recognize mood shifts. These may occur when a parent is being told of the desirability of modifying an irregularity in the child's development. Task ID#: 8161161

Participates as a Member of a Team (C09)

Work with peers and parents and show sensitivity to the needs of others. To perform this task, the childcare aide assists an ill co-worker by grouping children from the co-worker's group with aide's own group; offers emotional and physical support to the co-worker in a manner that is not confrontive when the co-worker is experiencing difficulties of any kind; and offers suggestions to the co-worker who is having a problem and cannot come up with a solution or reach a decision. Task ID#: 8091661

Work well with the teacher. To perform this task, the childcare aide communicates with the teacher about problems, works out a daily plan with the teacher, and cooperates with the teacher when changes must be made in the daily routine. Task ID#: 8092141

Work as a team with other teachers in the classroom. To perform the task, the childcare aide and these teachers communicate with each other to share ideas and offer assistance. For instance, they may help each other with the preparation of lesson plans, may jointly prepare the children's discovery areas, and may alternate performing the less desirable job duties, such as cleaning and laundry. The aides may take over the activities of a co-worker who may be absent and work together to learn about each other's specific job requirements, such as how to work with an infant versus a three-year-old child. Task ID#: 8091241

Teaches Others (C10)

Recognize that the child is having difficulty in a learning situation by identifying that the child seems frustrated, inattentive, withdrawn, or will not participate in activities. To perform this task, the childcare aide introduces a new concept to the child, followed by an activity; gives a thorough explanation on use of material and demonstrates how to use material; encourages the child to begin activity and observes the child's behavior;and intervenes if the child exhibits any of the behaviors listed above. Task ID#: 7111661

Serves Clients/Customers (C11)

In a thorough, accurate and tactful manner, express verbal and written ideas and evaluations to parents about the adjustment of their child to the new childcare situation. To perform this task, the childcare aide observes a new child for a two-week period to see how the child is adjusting to the new environment; records information such as how long the child cried, how the child stopped crying, and other pertinent incidents; informs a parent of a child's inability to adjust to the new environment without making the parent feel that the child is bad or that the aide dislikes the child; and relates adverse incidents to the parent promptly and accurately. Task ID#: 8111661

Understands Systems (C15)

Know where to go within the organization's management system when a problem arises. To perform the task, the childcare aide identifies a problem and determines who within the organization can resolve it. The aide also reviews manuals located in the main office to gather suggested courses of action. Task ID#: 8151241

Improves and Designs Systems (C17)

Complete conscientiously and knowledgeably an employee opinion survey and provide other suggestions for improvement. To perform this task, the childcare aide completes a survey about the organization's system, including suggestions or ideas that the aide feels may lead to improvement; responds when ideas are solicited by management on ways to improve the system and deliver better service to clients; and makes suggestions on his or her own initiative. Task ID#: 8171661

Applies Technology to Task (C19)

Understand the objectives and proper procedures for the use of motor skills development equipment and specially designed learning aids. To perform the task, the childcare aide acquires knowledge of the appropriate learning aid or tool to use when dealing with a specific age group. The aide sets up or demonstrates the use of specific equipment or helps and invites the child to work with the equipment or learning tool. The aide re-demonstrates the use of the tool or equipment if the child demonstrates a need or desire for assistance. If the aide ascertains that the learning tool or equipment does not work for a specific child, the aide will revise the activity, based upon knowledge gained from training and experience. Task ID#: 8191161

Reading (F01)

Understand and interpret written messages from parents concerning a child's needs. To perform the task, the childcare aide receives a note from a child's parents containing instructions regarding the administration of specified amounts of certain medicines to a child at given times. The aide reads, understands, and interprets the message and follows the instructions. Task ID#: 7011161

Listening (F05)

Listen to children during workbook activities. To perform the task, the childcare aide listens to a child's responses during a workbook activity and gives the child feedback based upon the accuracy of the child's response. Task ID#: 7051241

Be attentive to children in order to know about their needs. To perform this task, the childcare aide is alert to problems and deals with them in whatever way they require. For example, a child may need to go to the bathroom, or require more juice. Task ID#: 7052141

Creative Thinking (F07)

Use creative thinking when planning lessons. To perform the task, the childcare aide decides upon the content of the week's lesson plans. The aide generates new ideas for presenting standard themes to stimulate the children. For instance, if the children are studying farms, the aide may research whether the school can bring in a farm animal for display. If existing plans change suddenly due to unforeseen circumstances such as weather, the aide must generate new ideas to replace the existing plans. Other creative ideas generated by the aide may include planning different room arrangements to interest the children, such as a kitchen or grocery store, and planning field trips and special day activities. Task ID#: 7071241

Knowing How to Learn (F11)

Learn how to do an art project and teach it to the students. To perform this task, the childcare aide talks to the teacher to learn about the project; obtains needed supplies from the supply cabinet; explains to the children what is to be done, and works with the children individually if they are having problems. Task ID#: 7112141

Responsibility (F13)

Be responsible for the children's safety. To perform this task, the childcare aide watches children at all times; tells children to stay away from specified areas or not to climb on specified things; and provides first-aid when needed. Task ID#: 7132141

Exhibit high levels of commitment to job, children, and parents in line with the rules and regulations of the facility and the government. To perform the task, the childcare aide is punctual and arrives at work on time. The aide employs formal training and experience in childcare to determine a child's needs and to meet these needs. The aide takes steps to ensure that the children under his or her charge receive social, physical, and emotional care in a safe environment. Finally, the aide shares the details of the child's day with the parents. These actions help to increase parents' confidence in the worker's ability to care for the child and builds a better working relationship between the parents and the aide. Task ID#: 7131161

Take responsibility for classroom management. To perform the task, the childcare aide conducts a variety of activities including: completing lesson plans, being present for scheduled work shifts, ensuring the safety of the children, carrying out planned activities, taking the initiative to do laundry and maintain the area's cleanliness, watching the children when on the playground or field trips, and reporting the children's daily behavior and activities to parents. Task ID#: 7131241

Dental Hygienist (Based on Four Interviews)

Dental hygienists are responsible for a variety of services related to preventive dental health care. Some of the services include cleaning and scaling teeth, demonstrating good oral health practices, and developing public service information. The types of services provided by the hygienist depend upon the setting. Most hygienists work in private offices. Other places of employment include schools, clinics, and hospitals.

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	5.00	.00
C11	Serves Clients/Customers	5.00	.00
C10	Teaches Others	5.00	.00
C07	Interprets and Communicates Information	4.75	.50
C19	Applies Technology to Task	4.75	.50
C01	Allocates Time	4.50	.58
C14	Works with Cultural Diversity	4.25	.96
C06	Organizes and Maintains Information	4.00	1.15
C05	Acquires and Evaluates Information	4.00	1.41
C18	Selects Technology	4.00	.82
C12	Exercises Leadership	3.75	.96
C20	Maintains and Troubleshoots Technology	3.50	1.91
C13	Negotiates to Arrive at a Decision	3.50	1.29
C15	Understands Systems	3.25	1.71
C08	Uses Computers to Process Information	3.00	1.41
C16	Monitors and Corrects Performance	3.00	1.63
C17	Improves and Designs Systems	2.75	1.26
C03	Allocates Material and Facility Resources	2.25	.50
C02	Allocates Money	2.00	.82
C04	Allocates Human Resources	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F17	Integrity/Honesty	5.00	.00
F06	Speaking	4.75	.50
F05	Listening	4.75	.50
F09	Problem Solving	4.75	.50
F01	Reading	4.50	.58
F15	Social	4.50	.58
F02	Writing	4.50	.58
F16	Self-Management	4.25	.96
F12	Reasoning	4.25	.50
F14	Self-Esteem	4.25	.96
F11	Knowing How to Learn	4.00	.82
F08	Decision Making	4.00	.82
F10	Seeing Things in the Mind's Eye	3.75	1.50
F07	Creative Thinking	3.25	.96
F03	Arithmetic	3.25	1.26
F04	Mathematics	3.00	.82

Job: Dental Hygienist

Allocates Time (C01)

Coordinate the scheduling of patients with the dentist and the receptionist to allow time for hygienist procedures and priorities, and to attempt to stay on schedule by watching the amount of time spent with each patient. To perform this task, the dental hygienist develops an effective time schedule, following office criteria for various treatments and cleaning procedures; adjusts schedule as needed to allow for emergencies and unexpected interruptions; and coordinates all appointments with the office receptionist and the dentist to use time efficiently and maximize cost effectiveness. Task ID#: 8012031

Schedule specific time slots for the patient's treatment. To perform the task, the dental hygienist telephones a patient to arrange an acceptable appointment time and allocates the appropriate amount of time to meet the patient's needs. The hygienist also schedules regular recall times for check-ups and maintains the time schedule determined to be most appropriate for the patient. Task ID#: 8011331

Acquires and Evaluates Information (C05)

Identify specific patient dental diseases and determine necessary treatments and home care for the patient. To perform this task, the dental hygienist conducts a dental exam; determines alternative treatment procedures that could be followed to treat the disease; and identifies home care that will aid the dental treatment. Task ID#: 8052031

Obtain both dental and general health history from patients. To perform this task, the dental hygienist collects all of the necessary information pertaining to a given patient. This includes obtaining health records from a physician if the patient's general health indicates the need for this information. The hygienist also obtains information relative to a patient's dental health from the patient or from previous dentist(s); determines the effects of the patient's general health status on potential dental hygiene treatments; and recognizes when additional information will be needed to provide adequate dental hygiene treatment. Finally, the hygienist obtains additional data, such as information regarding a patient's diet and lifestyle, in order to determine the patient's oral health and the optimal dental hygiene treatment. Task ID#: 8051331

Examine the patients and communicate results to the doctor. To perform this task, the dental hygienist determines the reasons for the patient's visit and examines the patient's teeth and gums to evaluate their condition. Task ID#: 8051671.

Organizes and Maintains Information (C06)

Organize, update, and maintain patients' medical records and information in a readily accessible format. To perform the task, the dental hygienist keeps the patients' medical files in alphabetical format for easy access, and updates the rolodex containing the patients' addresses and telephone numbers as information becomes available. Task ID#: 8062171

Interprets and Communicates Information (C07)

Communicate information about the patient's condition to doctors, patients, family members, and insurance companies. To perform this task, the dental hygienist checks the patient and his or her dental charts and health records to determine the patient's overall condition; communicates to a doctor information found during teeth cleaning; reads radiograms after they are developed to assist in determining patient's needs; completes insurance forms when requested by the patient; and communicates information to the patient and family members. Task ID#: 8071671

Teaches Others (C10)

Teach patients the skills needed to maintain good oral health. To perform the task, the dental hygienist teaches patients how to brush and floss the teeth in order to keep them clean. The hygienist illustrates the techniques in a variety of ways, including demonstration, illustrative brochures, and teaching models; and provides a toothbrush, toothpaste, floss, and a mirror in which the patient can observe his or her own teeth. The hygienist also educates pregnant women about care for a young child's teeth and conducts classes on this topic, using teaching models. Task ID#: 8101331

Serves Clients/Customers (C11)

Perform dental services to benefit patients. To perform this task, the dental hygienist greets the patient and determines the patient's needs; performs a visual examination of the patient's mouth and jaw to determine their condition; takes x-ray photographs of the patient's mouth and jaw; uses scaler to remove loose tartar from the patient's teeth; checks the patient's teeth and gums using various pieces of dental equipment; and cleans the patient's teeth. Task ID#: 8111671

Perform the activities needed to check the patient's mouth for disease or cavities and to clean the patient's teeth. To perform the task, the dental hygienist greets the patient and leads him or her to the operating room; discusses the patient's medical history form; checks the patient's mouth for cavities, periodontal disease, and oral lesions; and polishes and flosses the patient's teeth. Task ID#: 8112171

Understands Systems (C15)

Distinguish how the job of dental hygienist is interrelated with other jobs in the office, especially with respect to scheduling. To perform this task, the dental hygienist discusses the daily schedule with other dental team members (dentist, receptionist, and dental assistants); demonstrates competence in understanding his or her own role in performing dental care; and understands which aspects the dentist and dental assistants are supposed to cover. Task ID#: 8152031

Work in conjunction with the office dental care personnel in operating the patient recall system and understanding the separate responsibilities of the various dental office staff. To perform this task, the dental hygienist calls patients into the office according to the specified office procedures; understands the separate responsibilities of different office staff such as dental assistant versus dental hygienist; performs only the duties specifically designated to the dental hygienist according to general practice, the Dental Hygienist Associations, and the Licensure Boards. Task ID#: 8151331

Monitors and Corrects Performance (C16)

Collect patients' comments and suggestions about service, and correct performance accordingly. To perform the task, the dental hygienist asks patients for suggestions on ways to improve service; considers the patients' ideas and suggestions; and applies them to the performance of daily tasks. Task ID#: 8162171

Applies Technology to Task (C19)

Treat a dental problem or disease after a diagnosis is complete, utilizing proper tools, medications, and procedures. To perform this task, the dental hygienist knows the anatomical structure of teeth, bones, and root surfaces and knows which tools to use on a particular tooth surface and where to use them; operates the x-ray machine to obtain dental pictures for an improved diagnosis; and applies the latest in prophylaxis tools and techniques to clean and treat the client's teeth. Task ID#: 8192031

Ascertain the proper and safe use of office machinery and equipment. To perform the task, the dental hygienist reads the manuals which accompany new machinery and equipment to learn about their proper and safe use; attends training sessions on safety and use of new machinery and equipment; operates machinery and equipment according to instructions; and confers with the manufacturer of the new machinery or equipment to discuss problems or gather operating tips. Task ID#: 8192171

Reading (F01)

Read the patients' charts in order to understand their dental history, and read professional materials to become familiar with the newest treatments. To perform the task, the dental hygienist reads the patient's charts in order to understand his or her dental history and current condition. Further, the hygienist reads information related to the use of specific equipment and of preventive applications in patient treatment. Finally, the hygienist reads professional publications in order to become familiar with new techniques for preventing dental diseases. Task ID#: 7011331

Listening (F05)

Listen to patients to determine their problems and complaints. To perform this task, the dental hygienist greets the patient in a friendly manner; listens to the patient's statements about his or her dental treatment; and listens to the patient's answers to standard questions designed to determine the patient's general health. Task ID#: 7051671

Speaking (F06)

Talk to a variety of people over the telephone for various purposes. To perform the task the dental hygienist converses on the telephone with patients, patients' family members, salespeople, suppliers and insurance companies, both to obtain and supply information. The hygienist also calls patients to verify appointments. Task ID#: 7061672Y

Describe treatments and provide home care instruction to a patient. To perform this task, the dental hygienist describes to a patient the recommended or necessary dental treatment; instructs the patient on home care verbally and by demonstration; and describes findings of patient exams to the dentist. Task ID#: 7062031

Problem Solving (F09)

Determine the nature and seriousness of patients' complaints and make decisions as to what action needs to be taken. To perform this task, the dental hygienist observes the nature of the problem and determines the best measures to handle the problem; and recommends proper care of dental problems which fall within the dental hygienist's area. Task ID#: 7091671

Seeing Things in the Mind's Eye (F10)

Take and interpret radiographs in order to assess the condition of a patient's teeth. To perform the task, the dental hygienist takes radiographs of the teeth to assist in periodontal care and to observe the condition of the area below the gum line. Task ID#: 7101331

Responsibility (F13)

Manage office and staff during the dentist's absence. To perform this task, the dental hygienist handles incoming telephone calls and the office mail; accepts and records payments from patients; and maintains equipment and the inventory of supplies. Task ID#: 7131671

Demonstrate competence, understanding, friendliness, empathy, and politeness to the patient. To perform this task, the dental hygienist listens intently to the patient's description of his or her dental problem or needs; recommends ideas to the patient regarding possible actions or treatments; and responds to the patient's apprehension about certain dental procedures by giving information and positive assurances to the patient. Task ID#: 7152031

Integrity/Honesty (F17)

Plan the appropriate patient treatment. To perform the task, the dental hygienist provides the exact treatment the patient requires and thus avoids overtreatment and overcharging for services. This enables the hygienist to maintain the patient's confidence. Task ID#: 7171331

Dietary Manager (Based on Four Interviews)

Duties performed by the dietary manager combine clinical and administrative services. The managers are responsible for meal planning and preparation on a large scale. Some of the services include supervising and training staff, preparing budgets, purchasing food and equipment, and establishing policy.

Competencies		Mean	Std. Dev.
C07	Interprets and Communicates Information	4.75	.50
C12	Exercises Leadership	4.75	.50
C05	Acquires and Evaluates Information	4.50	.58
C15	Understands Systems	4.50	.58
C11	Serves Clients/Customers	4.50	.58
C10	Teaches Others	4.50	.58
C09	Participates as a Member of a Team	4.25	.96
C04	Allocates Human Resources	4.25	.50
C17	Improves and Designs Systems	4.25	.50
C13	Negotiates to Arrive at a Decision	4.25	.50
C18	Selects Technology	4.00	.82
C14	Works with Cultural Diversity	4.00	.82
C01	Allocates Time	4.00	.82
C02	Allocates Money	3.75	1.50
C16	Monitors and Corrects Performance	3.75	.96
C06	Organizes and Maintains Information	3.50	1.00
C03	Allocates Material and Facility Resources	3.50	.58
C08	Uses Computers to Process Information	3.25	1.50
C19	Applies Technology to Task	2.50	1.29
C20	Maintains and Troubleshoots Technology	2.25	.96

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	4.75	.50
F17	Integrity/Honesty	4.75	.50
F13	Responsibility	4.75	.50
F01	Reading	4.75	.50
F09	Problem Solving	4.50	1.00
F06	Speaking	4.50	1.00
F02	Writing	4.50	.58
F12	Reasoning	4.50	.58
F08	Decision Making	4.25	.96
F16	Self-Management	4.25	.96
F03	Arithmetic	4.00	.82
F15	Social	4.00	.82
F14	Self-Esteem	3.75	.96
F11	Knowing How to Learn	3.75	1.26
F07	Creative Thinking	3.50	.58
F04	Mathematics	3.25	.50
F10	Seeing Things in the Mind's Eye	3.25	.50

Job: Dietary Manager

Allocates Time (C01)

Identify, prioritize, and assign dietitians to review and document nutritional needs. In a hospital, for example, the dietary manager would perform this task by reviewing diet sheets for new patients and new diet orders for existing patients, reviewing individual nutritional care plans in the cardex file for patients requiring follow-up visits, and generating a list of patients to visit and the reason for each visit. The manager would then assign dietitians to patients based on staff availability; identify high-priority patients or tasks to be performed; distribute clinical activity forms to dietitians; check the progress of dietitians on assignments to ensure completion of visits; and document the time spent with patients and results on a master copy of the clinical activity form. The manager would also discuss problems, such as inability to make a planned visit, with the dietitian responsible, and formulate a plan for remedying the problem. Task ID#: 8011461

Allocates Money (C02)

Compile and interpret budget data to monitor performance and forecast budgetary needs. To perform this task, the dietary manager gathers data on expenditures; summarizes the data in a concise form; interprets the data and compares them with data from the previous year to enable forecasting of future expenditures; and communicates results to upper management and to staff and recommends adjustments needed to achieve a balanced budget. Task ID#: 8021861

Monitor money for supplies from the framework of a fixed budget and adjust the budgetary plan so that it corresponds with fluctuating food prices. To perform this task, the dietary manager monitors purchasing records; allocates money to the units under his or her supervision according to need; and checks with a minimum of three vendors on prices of the items to be purchased. The dietary manager also receives any reports of equipment loss, damage, breakdowns, and abuse and factors these reports into purchase decisions. Finally, the manager readjusts the menu content and the list of menu items to be purchased based upon the obtained information. Task ID#: 8021031

Allocates Human Resources (C04)

Distribute the workload and evaluate the performance of the staff. To perform the task, the dietary manager ascertains whether an individual worker's difficulty is work related or a result of personal problems. Further, the manager schedules work assignments to ensure that all tasks are covered and creates contingency plans to deal with the absence of several workers from a particular unit. Employees are cross trained so that they can be shifted as the workload changes. Every six months, the manager reviews the work performance of the subordinate in light of the goals and work expectations set during prior review. The manager provides staff with positive feedback and constructive criticism. Task ID#: 8041311

Acquires and Evaluates Information (C05)

Obtain and act upon inventory information. To perform the task, the dietary manager tracks the usage of food, detergent, and small kitchen items through periodic inventory status reports. The manager also explores the reasons behind any large monthly expenditures. Task ID#: 8051031

Gather quality assurance data to evaluate effectiveness of the dietitian staff in meeting patient nutritional needs. To perform this task, the dietary manager develops quality assurance indicators and compares them to industry standards. The manager develops data collection forms, reviews patient charts to extract relevant data, and tabulates results. The manager also evaluates the results, compares them with industry standards, discusses the results with staff dietitians, and identifies deficiency areas. Where there is a deficiency, the manager assists the dietitian in developing a plan to correct it, implements the plan, and records it in a policy and procedure draft. The dietary manager conducts follow up consultations with the dietitian to evaluate the results of policy implementation. Task ID#: 8051461

Organizes and Maintains Information (C06)

Document all actions regarding personnel and receipt of food and supplies for the warehouse. To perform the task, the dietary manager organizes the information in a manner that ensures that it is accurately communicated to the staff; files the information for easy access and availability; and maintains receipts and orders for food and supplies. Effective documentation helps both in projecting future needs and budgetary allowances and in determining mismanagement or theft. Task ID#: 8061311

Interprets and Communicates Information (C07)

Translate industry standards into the daily staff functions required in order to ensure compliance with the standards. To perform this task, the dietary manager reads and interprets industry standards for his or her staff; prepares written standards; communicates these standards to the staff by such means as posting them; and monitors staff performance to ensure compliance with the standards. Task ID #: 8071861

Prepare and present a proposed budget containing projected expenditures for wages. To perform the task, the dietary manager prepares a graphical display of information on wage requirements, number of employees on hand, number of employees needed, and projected promotions and raises. He or she then presents this information to management in support of a wage increase or other budget requests. The manager also prepares graphs and reports of data on resident census and projected census, based upon available space and government regulation of the ratio of workers to residents. Task ID#: 8071551

Participates as a Member of a Team (C09)

Perform as a member of a management team while still showing concern and sensitivity for the needs and concerns of subordinate staff. To perform the task, the dietary manager shows loyalty to the management team; takes responsibility for all operations under his or her supervision; and assists subordinates in resolving their problems. For instance, if a subordinate staff member has a problem that can only be resolved by top administrators, the dietary manager acts as an intermediary between the two parties. Task ID#: 8091311

Exercises Leadership (C12)

Motivate food service staff to achieve and maintain high standards of customer service, despite negative aspects of the job. To perform this task, the dietary manager listens to the concerns/complaints of food service workers about rude or irate customers; encourages food service workers to provide good customer service, especially in difficult situations; provides the staff with instructional material on good customer service; role plays as a customer to assess staff customer service; and provides feedback to staff on customer service performance. Task ID #: 8121861

Manage and provide adequate staff resources. To perform this task, the dietary manager arranges training based upon identified needs. For instance, writing skills training is provided for staff who are deficient in that area, and interpersonal skills training is provided to the supervisory staff to reduce conflicts between supervisors and subordinates. The manager also directs the supervisory staff in the preparation of employee workplans and works to resolve operational problems such as those with equipment, staff, and menus. Task ID#: 8121031

Provide leadership and direction in assisting dietitian staff through a transition to new policies and procedures. To perform this task, the dietary manager drafts new service procedures and presents information about them to the dietitian staff. Encouraging feedback from the dietitians, the manager interprets and analyzes their suggestions and incorporates useful material into the new procedures. The manager finalizes procedures, prints copies of them, and distributes these copies to the dietitians. To ensure correct implementation of the new procedures, the manager conducts in-service staff training and assists in providing new services. The dietary manager evaluates staff performance in implementing the new procedure, solicits feedback and suggestions to correct implementation problems, and encourages staff members through transition phase. Task ID#: 8121461

Negotiates to Arrive at a Decision (C13)

Counsel employees to reach a mutually agreeable solution to a conflict. To perform the task, the dietary manager listens to each employee's version of a disagreement; tries to keep employees calm; reflects on the information each employee shared; and tries to determine particular employee needs in the situation. Afterwards, the manager meets jointly with the employees involved, explains the points of view, and tries to resolve the conflict or offer a compromise which will promote a smoothly running operation. Task ID#: 8131551

Understands Systems (C15)

Acquire the resources needed to upgrade equipment in a resource-scarce environment. To perform this task, the dietary manager identifies ways in which the request for new equipment relates to the needs of the organization; speaks with vendors and reviews equipment specification sheets to compile information on the potential benefits of the equipment to the organization; prepares a requisition detailing information obtained about the equipment; and presents the requisition to upper management. Task ID #: 8151861

Monitors and Corrects Performance (C16)

Stimulate the creation of communication development training on the basis of an observed need. To perform this task, the dietary manager first observes communication problems between specific staff members. After discussing the problems with the relevant parties, the manager contacts the employee relations training staff in order to facilitate a solution and discusses training ideas and potential dialogue for a training program, such as a video illustrating effective communication skills. Task ID#: 8161031

Improves and Designs Systems (C17)

Develop a nutritional screening program to improve identification of nutritional needs. To perform this task, the dietary manager conducts a comparison of present nutritional screening programs used at similar facilities and adopts a screening program appropriate for development. The manager reviews the proposed program with the dietitians and other pertinent staff, modifies the program by incorporating staff suggestions, and presents the proposed program to top management. After making requested changes or negotiating ideas, the manager submits the revised form to the administrator for approval. The dietary manager conducts in-service training on the new program for dietitian staff and implements the new program. Evaluating the results, the manager makes any program changes that are needed and reports the results to top management. Task ID#: 8171461

Selects Technology (C18)

Select the technology appropriate to a particular function, for example select an optimal dishwasher to accommodate new insulated serving trays. To perform this task, the dietary manager looks for new dishwashers that accommodate these trays and consults with purchasing and contract office engineers regarding the technology of the machine needed. The manager, with the help of the engineers, writes machine specifications, a proposal, and a purchase bid for the machine. Finally, the dietary manager coordinates the removal of the old machine and the installation of the new one, as well as staff training in the use of the machine. Task ID#: 8181031

Purchase new kitchen equipment based upon the facility's needs and the condition of the old equipment. To perform the task, the dietary manager contacts suppliers to inform them of the need for equipment; sets up appointments for demonstrations and/or an explanation of the features of the equipment; writes up proposals and sends out purchase orders to suppliers for solicitation of bids; reviews bids to determine the best equipment to purchase based on the needs of the facility, features of the equipment, purchase cost, and budgetary constraints; and purchases equipment and has it installed. Task ID#: 8181551

Writing (F02)

Document the nutritional needs of a patient or client. To perform this task, the dietary manager reviews and acquires pertinent nutritional information, and records all relevant data in order to assess nutritional needs and formulate a care plan. The manager then documents the assessment, calculates caloric intake, and records this calculation. The manager also writes recommendations on methods to improve nutritional care and files nutritional care plans. Finally, the dietary manager follows up on progress and documents findings in the file. Task ID#: 8021461

Review and revise policies and procedures manuals. To perform this task, the dietary manager annually reviews policies and procedures and identifies those that require revision on the basis of quality assurance results, procedural changes, and the implemation of new services. The manager develops a draft of revised or new policies and procedures, shares the draft with dietitian staff members, and incorporates their feedback. After reviewing the policy with the director of food service, the manager seeks approval from top management. The manager then produces the final version of the policies and procedures manual, prepares documentation of revision, and obtains administration approval. Finally, the dietary manager conducts follow-up reviews to check compliance with revised policies and retains the reviews in a file. Task ID#: 7131461

Arithmetic (F03)

Prepare budgets and keep track of labor, food, and supply costs. To perform the task, the dietary manager assesses and forecasts the number of full- and part-time employees needed based on a census of the facility; assesses and forecasts the number of those to be served; determines needed supplies and foodstuffs based on the number and type of special diets, number of meals served, average cost, and the amount available per meal; and projects and calculates expenses and income, taking into account such factors as number of employees, possible raises, equipment rental and repair, and number of meals sold. Task ID#: 7031551

Listening (F05)

Listen and respond to staff and supervisor complaints. To perform the task, the dietary manager receives a complaint and speaks with all of the concerned parties, listening to and evaluating what has been said. The manager responds to the complaint based upon the results of these interviews and upon the agency's formal personnel policies. The dietary manager also listens to suggestions and directives from supervisors and engages in round-table discussions with all relevant parties to gather input and constructive criticism in order to positively respond to a directive or suggestion. The manager then makes operational or procedural changes in dietary management and food service based upon these discussions. Task ID#: 7051311

Speaking (F06)

Speak to staff during meetings to communicate critical issues. To perform this task, the dietary manager prepares an agenda for the meeting; gives the agenda to a secretary for typing, reproduction, and distribution; speaks to the staff during the meeting to provide information and views regarding the agenda topics; listens to the concerns and responses of the staff regarding these topics; and discusses these topics with the staff until a resolution is reached. Task ID#: 7061861

Creative Thinking (F08)

Evaluate different procedures in order to develop more efficient or economical methods of operation. To perform this task, the dietary manager reviews and streamlines a variety of procedures, screening a variety of sources (e.g., trade publications) to identify potential changes or to generate ideas. Also, the dietary manager has staff meetings and roundtable discussions to develop teamwork and generate new ideas. Task ID#: 7071031

Decision Making (F08)

Decide upon the contents of various required menus (e.g., breakfast, lunch, dinner, and special functions). To perform the task, the dietary manager reviews requests for menu changes and determines if there is a need to change. The determination is based on such information as type of group to be served, type of service requested, number in group, and any special instructions. Afterwards, the manager selects food to be served, determines how food is to be served; and discusses food-related decisions with the cook. The manager contacts vendors to ascertain if food selections can be delivered when requested; orders food from vendors who can accommodate the manager's needs; contacts additional vendors if selections are not available or vendors are unable to deliver when requested; and changes menus if selected foods are not available when requested. Task ID#: 7081551

Problem Solving (F09)

Devise a method of feeding more patients or clients than are budgeted for or can be accommodated. To perform this task, the dietary manager consults with the staff regarding possible solutions to the problem; speaks to vendors and reviews industry guides and manufacturers' brochures to identify equipment available to resolve the problem; meets with administrators to convince them to lease new equipment for a specific period; negotiates with vendors to obtain a lease agreement to test new equipment; retrofits new with existing equipment; tests a new system to ensure that it functions as planned; and documents results and submits them to management. Task ID#: 7091861

Identify a nutrition standard not being met and determine a plan to meet it. To perform this task, the dietary manager reviews the nutrition standard to ensure that quality assurance procedures are followed and reviews current data to identify specific deficiencies. The manager reviews the results with the dietitian staff, uses staff recommendations to develop a plan to correct nutritional deficiencies, and conducts necessary in-service training for staff to implement the plan. Based on a follow-up review to check for compliance with the standard and to document findings, the manager reports the results to quality assurance staff in a timely manner. Task ID#: 7091461

Responsibility (F13)

Ensure that the patient load of 360 is adequately fed during merger of establishment with another hospital. To perform this task, the dietary manager dresses in expendable clothing to assist food service personnel; performs duties of food service personnel (washes dishes, cooks food, and passes trays); and works 16 to 17 hours a day, 7 days a week for several weeks. Task ID#: 7131861

Take responsibility for one's own actions and serve as a positive role model for staff. To perform the task, the dietary manager follows all personnel and policy procedures, especially those regarding attendance and punctuality. The manager also shows a willingness to accept responsibility for problems, including those of an entire food preparation and food service operation. Task ID#: 7131311

Licensed Practical Nurse (Based on Four Interviews)

Licensed Practical Nurses (LPNs) may work in hospitals (approximately 50%), nursing homes, doctors' offices, and private homes. In general, LPNs in hospitals and private homes provide bedside care to patients. Responsibilities include taking temperature, blood pressure, pulse and respiration rate; observing and reporting on patient responses; administering medication specified on a patient chart; and performing other bedside care duties. In the other establishments, they provide a wide variety of services that combine clinical and clerical duties.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	4.75	.50
C09	Participates as a Member of a Team	4.50	1.00
C14	Works with Cultural Diversity	4.50	1.00
C18	Selects Technology	4.00	.82
C15	Understands Systems	4.00	.82
C12	Exercises Leadership	4.00	.00
C01	Allocates Time	4.00	1.41
C07	Interprets and Communicates Information	3.75	1.26
C16	Monitors and Corrects Performance	3.75	.50
C10	Teaches Others	3.75	.50
C05	Acquires and Evaluates Information	3.50	1.73
C17	Improves and Designs Systems	3.50	.58
C13	Negotiates to Arrive at a Decision	3.50	1.29
C19	Applies Technology to Task	3.25	1.50
C08	Uses Computers to Process Information	3.00	1.83
C06	Organizes and Maintains Information	2.75	1.71
C03	Allocates Material and Facility Resources	2.75	1.50
C04	Allocates Human Resources	2.25	.96
C20	Maintains and Troubleshoots Technology	2.25	.50
C02	Allocates Money	1.50	.58

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F05	Listening	4.75	.50
F15	Social	4.75	.50
F14	Self-Esteem	4.75	.50
F06	Speaking	4.50	1.00
F17	Integrity/Honesty	4.50	.58
F08	Decision Making	4.25	.50
F02	Writing	4.25	.96
F16	Self-Management	4.25	.50
F09	Problem Solving	3.75	.96
F03	Arithmetic	3.50	.58
F12	Reasoning	3.50	1.29
F11	Knowing How to Learn	3.50	1.00
F07	Creative Thinking	3.25	.50
F01	Reading	3.25	.96
F10	Seeing Things in the Mind's Eye	3.00	.82
F04	Mathematics	2.25	.96

Job: Licensed Practical Nurse

Allocates Time (C01)

Plan daily schedule according to received assignments. To perform this task, the licensed practical nurse receives a report of the number of patients he or she will be responsible for during the day; plans the order of patient visits according to the LPN's time frames and activities for the day; allows time for each patient according to the care needed, and for performance of needed paperwork. Task ID#: 8011771

Allocates Human Resources (C04)

Decide the personal needs of patients, for example, of a specific substance abuse patient. To perform this task, the licensed practical nurse assesses the personal situation of a substance abuse patient; finds out the needs of the mother; decides who could best satisfy these needs; and communicates the needs to relevant personnel (e.g., a public health nurse or a social worker). Task ID#: 8041781

Uses Computers to Process Information (C08)

Transcribe patient orders from chart to computer. To perform this task, the licensed practical nurse reads a chart or patient order and uses the LPN's personal code to access the computer; employs menu categories and probes in order to enter patient information (this involves selecting the patient's name from the menu and entering all relevant information); and pulls any needed information from the patient's file. Task ID#: 8081771

Obtain information relevant to the medical condition and/or treatment of a patient. To perform this task, the licensed practical nurse inputs patient's ID number; uses the probe to select the relevant patient and desired information; enters request for lab results (using the probe); acquires test results; makes copies of the materials and places printouts on the appropriate patient's chart. Task ID#: 8081781

Works with Cultural Diversity (C14)

Communicate and relay information to people who do not speak English. To perform this task, the licensed practical nurse recognizes that the person does not speak English and that it will be necessary to relay some information to the person. The nurse tries to convey or obtain information with gestures, tries to find another nurse who speaks the second language, or searches the computer for an interpreter and contacts the listed individual. If no names are found, the nurse contacts the nursing office about obtaining an interpreter. Task ID#: 8141771

Obtain an interpreter to communicate with a non-English speaking patient. To perform this task, the licensed practical nurse discovers that he or she is unable to communicate needed information to the patient and calls for an interpreter to communicate lab results, breast feeding information, etc. Task ID#: 8141781

Understands Systems (C15)

Understand relevant systems, such as knowing how a hospital's social service department functions in order to be able to answer patients' questions about home follow ups. To perform this task, the licensed practical nurse identifies a patient's needs for social services in and out of the hospital; identifies the services available (continuing care, social worker, instructor for diabetics, etc.); and initiates social service referral by calling the appropriate channel. In the case of older patients, the nurse needs to know how to involve the family in the decision making process, such as by calling a meeting with the social worker and family members in order to decide on a patient's placement. Task ID#: 8151771

Improves and Designs Systems (C17)

Improve the system for communicating the needs of substance abuse mothers to the nurse, social worker, public health nurse, physician, etc. To perform this task, the licensed practical nurse identifies the need for improvement; decides upon the best method of improvement, such as setting aside a day each week for a multi-disciplinary meeting (physician, social worker, nurses, home health care coordinator, etc.); and discusses various patients' needs for follow-up or protective services by assessing the mother's ability to provide for the child once the patient is released. Task ID#: 8171781

Selects Technology (C18)

Decide on the appropriate technology, such as which tools are needed to change a patient's dressing. To perform this task, the licensed practical nurse thinks about the type of dressing to see what tools are relevant; selects the appropriate tools (for instance, if it is necessary to remove staples, a staple remover and 4" x 4" gauze dressing); selects clamps and suction configuration if the dressing includes a drain removal; and removes the dressing. Task ID#: 8181771

Treat a jaundiced baby. To perform this task, the licensed practical nurse helps the doctor decide what tools will best bring down the jaundice level of the child; places the baby under a phototherapy light (to bring down the jaundice level) and in a heated isolette (incubator) to observe the baby and administer heat. Task ID#: 8181781

Writing (F02)

Record the patient's activity and other observations on a variety of forms. To perform this task, the licensed practical nurse observes the patient's behaviors and characteristics; interprets readings and activities in order to make an assessment of the cause; and uses a variety of forms to document final decisions about activities and observations on a variety of forms. Task ID#: 7021781

Listening (F05)

Receive information from patients for an admission database. To perform this task, the licensed practical nurse asks the patient a structured set of questions, including personal history and present complaints; listens to responses and records responses on the form; and takes and records vital signs. Task ID#: 7051771

Decision Making (F08)

Decide whether or not to discontinue an intravenous treatment (I.V.). To perform this task, the licensed practical nurse examines the I.V. and determines if it is properly flowing into the system; visually inspects the area around the I.V. for swelling and/or signs of inflammation; consults physician about whether to leave the I.V. in the arm based upon these observations. Task ID#: 7081781

Problem Solving (F09)

Attempt to resolve problems listed on a patient's problem list. To perform this task, the licensed practical nurse identifies the problem (such as pain secondary to a fractured right hip); lists the problem on the form; attempts to decide on the best method of relieving the pain (i.e., traction, immobilizing a joint, performing other comfort steps); performs a neuro-vascular check to ensure that there are no complications; asks for or listens to patient's assessment of pain after the initial treatment; deals with these complaints by assessing whether they are valid; and, if they are, tries additional comfort treatments. Task ID#: 7091771

Responsibility (F13)

Be competent and responsible to oneself, the task, staff and team members, and show ability to lead and independently perform activities. To perform this task, the licensed practical nurse takes the initiative to provide care to others, and demonstrates the ability to complete the job independently. Task ID#: 7131781

Social (F15)

Deal politely with family members of a very sick patient. To perform this task, the licensed practical nurse receives frequent telephone calls from family members requesting information; responds politely and empathetically to all inquiries; instructs family members on maintenance of the patient at home (i.e., how to maintain tubes, change dressings); and understands family members' needs and offers family referral options if it is felt that they are needed (nursing home, social workers, etc.). Task ID#: 7151771

Medical Assistant (Based on Four Interviews)

Medical assistants perform both clinical and administrative tasks while helping physicians examine and treat patients. Clinical duties may include taking and recording medical histories, preparing patients for exams, collecting specimens, and cleaning medical equipment. Administrative duties may include answering the telephone, recording and filing patient records, and scheduling appointments. Most medical assistants work in physicians' offices but a growing number work in clinics and hospitals.

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	5.00	.00
C01	Allocates Time	4.75	.50
C11	Serves Clients/Customers	4.25	1.50
C06	Organizes and Maintains Information	4.00	2.00
C05	Acquires and Evaluates Information	3.75	1.89
C15	Understands Systems	3.75	.96
C19	Applies Technology to Task	3.75	1.89
C07	Interprets and Communicates Information	3.75	1.89
C10	Teaches Others	3.50	1.73
C17	Improves and Designs Systems	3.25	2.06
C14	Works with Cultural Diversity	3.25	1.71
C12	Exercises Leadership	3.00	1.63
C16	Monitors and Corrects Performance	3.00	1.63
C03	Allocates Material and Facility Resources	3.00	1.63
C20	Maintains and Troubleshoots Technology	2.75	1.26
C04	Allocates Human Resources	2.25	1.89
C18	Selects Technology	2.25	.96
C13	Negotiates to Arrive at a Decision	2.00	.82
C02	Allocates Money	1.75	1.50
C08	Uses Computers to Process Information	1.50	1.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F17	Integrity/Honesty	5.00	.00
F13	Responsibility	4.75	.50
F14	Self-Esteem	4.75	.50
F15	Social	4.75	.50
F05	Listening	4.50	1.00
F11	Knowing How to Learn	4.25	1.50
F01	Reading	4.25	1.50
F16	Self-Management	4.25	.50
F02	Writing	4.00	1.41
F09	Problem Solving	4.00	.82
F06	Speaking	4.00	1.15
F12	Reasoning	3.75	1.89
F03	Arithmetic	3.50	1.91
F10	Seeing Things in the Mind's Eye	3.25	1.71
F08	Decision Making	3.25	1.71
F04	Mathematics	2.75	1.26
F07	Creative Thinking	2.25	.50

Job: Medical Assistant

Allocates Time (C01)

Create daily goals to meet a doctor's schedule and prioritize work to keep on schedule and thus maintain good patient flow. To perform this task, the medical assistant evaluates the doctor's schedule to prioritize the work to be done; maintains some flexibility in the schedule because of the doctor's need to be available for emergencies; and develops and follows an effective schedule based on time estimates, time constraints, prioritizing of tasks, and task deadlines so as to maximize efficiency and cost effectiveness for both the doctor and the other medical staff. Task ID#: 8012061

Ensure an even flow between patients entering the examining rooms and patients being discharged. To perform the task, the medical assistant prioritizes patient activities in order to keep them flowing smoothly. For instance, the assistant asks a patient to wait in an examining room and lets the doctor know the patient is there. While the patient is in the examining room, the assistant completes the discharge of other patients per the physicians's instructions. Discharging includes preparing papers for lab work, giving an injection, administering a test, or entering patient information into the computer. Task ID#: 8011071

Allocates Material and Facility Resources (C03)

Acquire, maintain, and track supplies on hand. To perform the task, the medical assistant inventories supplies and equipment and mentally tracks their use, observes stock visually each time stationery is removed to track the amount needed, fills out forms to reorder supplies or telephones a supplier. The assistant also checks stock when a salesperson visits the office, giving the salesperson a written or verbal order, and obtaining extra supplies when specific merchandise is on sale. Task ID#: 8031541

Allocates Human Resources (C04)

Provide adequate coverage for doctors when other medical assistants do not arrive at work. To perform the task, the medical assistant plans how to keep the clinic running with fewer assistants than are usually available. The assistant prioritizes activities, asks physicians what work can wait and what must be completed immediately. Further, the assistant explains to patients that they may experience a delay in the receipt of services due to a staff shortage. Finally, the assistant helps plan how to adjust the allocation of lunch hours in order to ensure adequate coverage during this time period. Task ID#: 7091071

Organizes and Maintains Information (C06)

Organize, file, and keep medical records up-to-date. To perform the task, the medical assistant creates, for each new patient, a file folder containing medical forms, personal information, insurance, and billing forms. The assistant also makes notations in the patient's folder each time he or she calls or visits the office, examines the folder after each visit to ensure that the physician has recorded any appropriate notations, records any medications prescribed by the physician, and files all charts or places the charts in the pending laboratory file at the end of each day. Task ID#: 8061541

Participates as a Member of a Team (C09)

Work cooperatively with others, such as doctors, office personnel, nurses, lab technicians, and patients, to render professional, competitive, and compassionate services to patients. To perform this task, the medical assistant exchanges information with other team members; works cooperatively with other team members at all times; and is flexible and willing to sacrifice his or her own time and talent to meet emergencies and to fill in for other workers as needed. Task ID#: 8092061

Serves Clients/Customers (C11)

Listen to a patient to determine his or her needs and feelings. To perform the task, the medical assistant listens to a patient's anger, frustration or other feelings in a calm manner, soothes the patient, and explains the need to voice problems or concerns with the physician, as appropriate. The assistant also listens to a patient who communicates outside information, and explains how the patient's case is different, why the physician is using a specific treatment, or why certain medications have been prescribed. The assistant also notes the patient's concerns on the patient chart so that the physician can contact the patient and schedule an interim appointment. Task ID#: 8111541

Understands Systems (C15)

Understand the system of the organization and the organization's ultimate goal (i.e., excellent patient care). To perform this task, the medical assistant attains knowledge of the organization and keeps up with changes; responds to demands of the system when assignment changes occur; stays current on which departments in the system handle what specialties; and learns what patient services are offered by resources outside of the organization. Task ID#: 8152061

Prepare patients for admittance per request by the physician. To perform the task, the medical assistant calls the business office to notify it of a patient admission. The assistant also reports the patient admittance to the nurse. Further, the medical assistant knows who to call to receive test results or how to check the computer for these results. Task ID#: 8151071

Know office procedures, time needed for specific procedures, and time needed by specific patients. To perform the task, the medical assistant questions the patient to ascertain if he or she have seen the doctor previously, to gather information about the procedure to be performed, and to determine the nature of the visit and the type of appointment to make. At this point, the assistant allots time with the doctor based upon that information and keeps the schedule moving, allowing buffer time to absorb unforeseen delays. The assistant also obtains required information from a new patient, creates a chart for the patient, sets up an examining room, and takes the patient's vital signs. Finally, the assistant introduces the patient to the physician, looks up the patient's diagnosis code, calculates the patient's charges, schedules any prescribed tests, offers the patient directions to the laboratory, presents the bill to the patient, and schedules an appointment for a return visit. Task ID#: 8151541

Selects Technology (C18)

Choose the proper machine to assist in diagnosis or treatment of the patient. To perform this task, the medical assistant receives the doctor's evaluation of the patient's condition and assists the doctor in determining the type of machine that could best assist the patient. Task ID#: 8182061

Applies Technology to Task (C19)

Set up and operate machines required to monitor a specific patient's condition. To perform this task, the medical assistant hooks the patient up to the EKG machine by attaching leads from the machine to the patient's legs, arms, and chest; starts the machine; monitors the machine's operation in order to detect malfunctions; and makes necessary corrections; attaches leads from the Holter monitor to the patient; inserts tape into the machine; checks batteries; and starts the machine to ensure its proper functioning; instructs patient as to what can and cannot be done while wearing the Holter Monitor; gives the patient a diary; instructs the patient as to what activities to record in the diary; removes the monitor from the patient; removes the tape from the monitor; and mails the tape out for scanning and processing. Task ID#: 8191541

Listening (F05)

Gather information about the patient's needs. To perform this task, the medical assistant receives instruction from the doctor regarding the patient and procedures to be used, and receives information from medical representatives regarding new medicines, equipment, and procedures. The medical assistant also listens intently to the patient to determine the patient's health problem and to understand the patient's needs; encourages the patient to disclose all information about his or her condition or desires for service; discusses the patient's treatment with the doctor's involved; and receives instruction from vendor medical representatives regarding new innovations in medicines and medical procedures. Task ID#: 7052061

Handle a patient's telephone call. To perform the task, the medical assistant asks the patient the nature of the call and requests a description of any symptoms. Next, the assistant attempts to identify the problem from the information obtained, notes all symptoms to be provided to the appropriate physician, and acts upon the obtained information. Task ID#: 7051541

Speaking (F06)

Explain a specific medical procedure to a patient in a way that is understandable, such as explaining how and why pulmonary function tests are used—To perform the task, the medical assistant explains to the patient what must be done to perform the test and how it must be performed; demonstrates the procedure to the patient; tells the patient to take a deep breath, ensuring that no air seeps from the mouthpiece, and blow hard into the machine; observes the patient performing the test and explains or demonstrates again if the patient is performing the procedure incorrectly. Task ID#: 7061071

Decision Making (F08)

Decide upon a suggested course of action for a patient based upon his or her symptoms. If the medical assistant receives a call from a patient who is complaining of an irregular heartbeat, the assistant pulls the patient's chart to examine his or her medical history and questions the patient to obtain additional information, such as the onset of the symptom, previous occurrences, and the magnitude of the problem. On the basis of whether or not a symptom appears life threatening, the assistant decides whether to instruct the patient to go to the emergency room, visit the physician in his or her office, or wait until the doctor can be contacted for instructions. Task ID#: 7081541

Knowing How to Learn (F11)

Recognize changes in medicines, medical techniques, and equipment. To perform this task, the medical assistant develops the desire to learn the latest in medical techniques by studying about current techniques; devotes his or her spare time to studying new medical innovations and media presentations; and shows a willingness to keep abreast of current trends by volunteering for upgrade training presentations. Task ID#: 7112061

Responsibility (F13)

Show a sense of responsibility to the organization, such as by opening the telephones at 7:00 a.m. when the nurses have not yet arrived. To perform the task, the medical assistant turns on the telephone system and delegates work to other medical assistants. The medical assistant in charge of the telephones talks to patients, answers patient's questions, and determines if it is necessary for the patient to see a doctor. If a visit is necessary, the assistant schedules an appointment for the patient. Task ID#: 7131071

Self-Esteem (F14)

Have confidence in one's ability to do his or her job. To perform the task, the medical assistant exhibits an understanding of medical procedures and of how to approach a patient. The assistant has a belief that he/she is capable of doing the job and is willing to attempt new job tasks. Task ID#: 7141071

Social (F15)

Make new medical assistants feel welcome. To perform the task, the medical assistant treats new workers with friendliness and understanding and helps them to adapt to new situations. The medical assistant acquaints new workers with the surroundings and with other staff, encourages the workers to ask questions about system procedures and operations, and ascertains when new workers are ready to perform assigned tasks. Finally, the assistant follows up to assess the performance of new workers. Task ID#: 7151071

Deal with a patient who has received a negative test report from a physician. To perform the task, the medical assistant listens to and empathizes with the patient as he or she shares the problem and assists the patient in understanding the problem, including answering questions, urging the patient to call with any additional concerns, and assuring the patient of the availability of help. The assistant also sets up appointments for the patient with surgeons, visiting nurses, or agencies that can be helpful to the patient. Task ID#: 7151541

Integrity/Honesty (F17)

Maintain confidences and not discuss information beyond the doctor's office. To perform this task, the medical assistant maintains confidences concerning patient records and the doctor's notes and comments; displays a willingness to uphold the integrity of the medical establishment; and understands the penalties associated with violating the trust of the organization and/or patients. Task ID#: 7172061

Medical Technologist (Based on Four Interviews)

In general, medical technologists perform a variety of tests to provide data for use in treatment and diagnosis of disease. Technologists in small laboratories perform a variety of tests while those in large clinics usually specialize. Most technologists perform tests ordered by physicians. Other work performed by technologists includes teaching, consulting, research, and management and administrative positions.

Competencies		Mean	Std. Dev.
C08	Uses Computers to Process Information	4.75	.50
C10	Teaches Others	4.75	.50
C01	Allocates Time	4.75	.50
C19	Applies Technology to Task	4.50	.58
C16	Monitors and Corrects Performance	4.50	.58
C11	Serves Clients/Customers	4.50	1.00
C09	Participates as a Member of a Team	4.25	.50
C20	Maintains and Troubleshoots Technology	4.25	.96
C18	Selects Technology	4.00	1.15
C15	Understands Systems	4.00	2.00
C14	Works with Cultural Diversity	4.00	.82
C07	Interprets and Communicates Information	3.75	1.26
C12	Exercises Leadership	3.75	.50
C05	Acquires and Evaluates Information	3.50	1.29
C06	Organizes and Maintains Information	3.25	2.06
C03	Allocates Material and Facility Resources	3.25	1.26
C17	Improves and Designs Systems	3.25	.96
C13	Negotiates to Arrive at a Decision	2.75	1.50
C04	Allocates Human Resources	2.00	.82
C02	Allocates Money	2.00	.82

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F17	Integrity/Honesty	4.75	.50
F09	Problem Solving	4.50	.58
F08	Decision Making	4.50	1.00
F16	Self-Management	4.50	.58
F01	Reading	4.50	.58
F02	Writing	4.25	.96
F14	Self-Esteem	4.25	.50
F11	Knowing How to Learn	4.25	.96
F06	Speaking	3.75	1.26
F04	Mathematics	3.75	.96
F03	Arithmetic	3.75	1.26
F12	Reasoning	3.75	.96
F05	Listening	3.50	1.29
F15	Social	3.50	1.00
F10	Seeing Things in the Mind's Eye	3.50	1.73
F07	Creative Thinking	3.25	1.26

Job: Medical Technologist

Allocates Time (C01)

Perform emergency requests within a specified period of time. To perform the task, the medical technologist receives an emergency (STAT) lab specimen request. The information about this specimen is verified and the specimen is given a lab accession number. Next, the specimen is sent to the bench for analysis. A technologist separates out the routine from the STAT requests, prioritizes the STAT requests (emergency room, ICU, in-patient), runs the analyses, assesses the results, and reports to the physician as required. Task ID#: 8011351

Organizes and Maintains Information (C06)

Run a quality control test with every analysis. To perform the task, the technologist receives a specimen and prepares it for analysis. For each sample analyzed, the technologist runs one normal and one abnormal sample for quality control purposes. After the sample is analyzed, the technologist views the quality control samples to see whether they fall within the established ranges. If so, the results are put into the daily log. The technologist looks at the quality control data on a weekly basis to identify any data trends or any shifts in the form of the plotted bar graph. If a trend or shift is noted, the technologist searches for and documents the reason. For instance, the trend might be due to a change in the lot sample number or might indicate an instrument problem. Task ID#: 8061351

Interprets and Communicates Information (C07)

Interpret test results and deliver them to the appropriate physician. To perform the task, the medical technologist reads test results to decide whether or not they are classifiable as normal. He or she recognizes when the values are at a critical level and telephones those results to the physician. Task ID#: 8071411

Uses Computers to Process Information (C08)

Use the computer both to order supplies and to store the amounts received. To perform the task, the medical technologist identifies the need for supplies, such as by looking in the computer for a record of the amount on hand. Amounts are checked regularly to see whether they are running low. Orders for needed supplies are put into the computer and necessary approvals are obtained prior to actual placement of the order. When the order arrives, the technologist puts the amount of each item received into the computer. Task ID#: 8081021

Teaches Others (C10)

Train new workers in laboratory procedures, such as the operation of lab machines. To perform this task, the medical technologist performs assigned lab activities while a trainee watches. This includes modeling how to troubleshoot machine problems. The technologist then observes the trainee's performance of the same procedures. The trainee is assisted with areas in which difficulties arose and is provided with performance feedback. Finally, the technologist decides when the trainee appears confident enough to work independently. Task ID#: 8101021

Works with Cultural Diversity (C14)

Communicate test results to non-native English speaking medical personnel. To perform this task, the technologist makes sure to speak with the medical staff member involved with the patient tested. The technologist reports the test results to this staff member in clear English, making sure to spell words that may be difficult for a non-native English speaker to understand. The technologist repeats the information when requested, and then asks the staff member to repeat the message to confirm that it has been absorbed in its entirety. Finally, the technologist exchanges identifications with the staff member if this has not already been done. Task ID#: 8141011

Understands Systems (C15)

Understand the procedures necessary to perform laboratory functions. To perform the task, the medical technologist receives a specimen, uses a computer system to validate the request order for a lab test, and assigns the test a number. The technologist then runs the test, accesses the patient's number and request in the computer, and inputs the test results. Finally, the technologist verifies the information and sends the results to the patient's physician. Task ID#: 8151351

Monitors and Corrects Performance (C16)

Perform quality control procedures to monitor the functions of the laboratory and the technologist's own performance. To perform the task, the medical technologist uses the quality control form to compare laboratory results to a specified range and to recognize any deviations from the "normal" range. The technologist acts upon any recognized deviations, for example, by re-running problematic tests. Task ID#: 8161411

Improves and Designs Systems (C17)

Improve the design and operation of an organization's systems, such as by incorporating a new chemical testing reagent into the laboratory process. To perform the task, the medical technologist first learns about a new reagent product from a sales representative. The technologist then evaluates the new reagent to see if it would benefit existing laboratory protocol. This includes running parallel testing between existing reagents and new reagents. If the parallel study indicates that a new reagent is better, the technologist writes up the procedure for review by the supervisor. Next, the supervisor's approval for use of the new procedure is obtained, the new reagent is purchased from the sales representative, and, finally, all relevant personnel are trained in the use of the new reagent. Task ID#: 8171011

Applies Technology to Task (C19)

Apply technology to the tasks at hand, such as by using a machine instead of a manual process to identify organisms and perform sensitivities. To perform this task, the medical technologist selects the pathogen that needs to be identified. Next, the technologist inoculates the identification and sensitivity card of the machine for identifying organisms and performing sensitivity tests. After inoculation, the sensitivity card is incubated overnight. The following day, the technologist prints out the data results generated by the machine and enters this data into the computer. Task ID#: 8191011

Run a culture test on a specimen. To perform the task, the medical technologist makes an assessment as to the appropriate culture medium based upon the type of specimen involved; plants the specimen on the selected medium; incubates the culture for 24 hours; and reviews the culture to determine the presence or absence of pathogens. If no pathogens are present, the technologist incubates the culture for an additional 24 hours. If pathogens are present, the technologist performs a subculture in another selective medium to get a pure culture, after having performed a gam stain to distinguish organisms and determine which selective medium to use. Next, the technologist runs a series of biochemical tests to determine the identity of the organisms, sets up an antibiotic susceptibility test to determine which antibiotic is most effective given the results, and, finally, sends a report to the patient's physician. Task ID#: 8191351

Maintains and Troubleshoots Technology (C20)

Be aware of the need to troubleshoot the technology utilized, such as by identifying why machine results are backlighted and thus result in inappropriate readings. To perform this task, the medical technologist recognizes that the machine results are backlighted and checks the slides to see why the machine may be giving these types of results. If the results are due, for example, to a small clot which was initially undetected in the sample, the technologist would bleach the apertures (parts of the machine that test red blood count, white blood count, etc.) to eliminate the clot. Task ID#: 8201021

Identify a potential instrument problem (such as a quality control reading that is not within specifications) by troubleshooting the machine. To perform the task, the medical technologist identifies the portion of the instrument which might be resulting in the difficulty. He or she troubleshoots the area in an attempt to fix the problem, following a specified protocol. For instance, the technologist may check the level of reagent or whether the instrument is unclean. If all of the parts of the instrument pass inspection and the problem still exists, the technologist notifies the machine representative to receive assistance. Task ID#: 8201411

Troubleshoot the Coulter machine when something appears wrong (such as a bad reading, no reading, an alarm). To perform this task, the medical technologist first recognizes that a problem exists by identifying a bad reading, no reading, or an alarm. The technologist then attempts to identify the nature of the problem by reading the section of the machine that has the problem/location key. The manual is used to understand the codes and manual directions are used in an effort to fix the machine. If the technologist cannot fix the machine, the Coulter service is called. The technologist shares relevant information with the Coulter service representatives and follows their machine repair directions. Task ID#: 8161021

Reading (F01)

Read the information which is generated by the machines, including screen and hard copies. To perform this task, the medical technologist obtains particular count readouts and reads these to ensure that they agree with the machine indications. When a patient's count reading is identified as high, the technologist re-checks to see if the patient is on an anti-coagulant. If the patient is not on an anti-coagulant, the technologist asks for a redraw so that the test could be re-run and the readings double checked. Task ID#: 7011021

Writing (F02)

Use the computer to write a report of lab results for use by the appropriate physician. To perform this task, the medical technologist enters a preliminary report into the computer for interpretation by the requesting doctor. The report highlights the results of a laboratory culture test and includes a detailed description of how the organism of interest was identified. The following day, a final report, which identifies the organism, is entered into the computer. At this point, the technologist documents how the organism was identified. Task ID#: 7021011

Arithmetic (F03)

Use various test results to determine the health of a kidney. To perform the task, the medical technologist determines a serum creatinine value; determines a urine creatinine value based on a 24-hour urine collection; and divides the serum creatinine value by the urine creatinine value to arrive at an hourly renal clearance value. These procedures result in a numerical value which, if it falls between certain levels, indicates the health of the kidney. Task ID#: 7031351

Analyze and report laboratory results. To perform the task, the medical technologist obtains numbers from an instrument. The technologist needs to understand what the instrument results mean and how the numbers are derived. The technologist recognizes whether these values are far from the "normal" value and understands possible reasons for outliers, including problems with technologist technique, instrument functioning, or the reagent used. The technologist checks the resulting numbers against the quality control form to observe whether the value falls within the allotted range of two standard deviations. If the number is not within range, the technologist performs the test a second time. Task ID#: 7031411

Decision Making (F08)

Decide whether or not the organism viewed in a laboratory culture is pathogenic. To perform this task, the medical technologist views the petrie dish to see if anything is growing. If there is any type of growth, the technologist determines what might be normal flora and what might be a pathogen. The technologist also decides whether the culture shows multiple organisms. If the organism is contaminated, the worker must redo the sample. After these decisions are made, the technologist identifies the organism (i.e., staph, gram-negative). Finally, the worker determines whether the colony count is heavy, moderate, or light in order for the doctor to prescribe the appropriate dosage. Task ID#: 7081011

Decide upon the ordering of the blood test requests. To perform the task, the medical technologist decides which of the existing tests is most important (such as emergency tests) and which tests are less pressing. He or she orders the work accordingly. Task ID#: 7081411

Problem Solving (F09)

Deal with the situation which exists when a machine reading shows a discrepancy from the expected values or range for each parameter measured (blood counts, etc.). To perform this task, the medical technologist receives a tube of blood and runs the sample through the appropriate machine (Coulter or ACL). If the technologist reads the printout and recognizes that the machine output is not the same as the expected values or range, then he/she checks for possible reasons for the discrepant results. These steps may include ascertaining whether insufficient blood was drawn, a small clot was missed in the sample, or the blood is hemolyzed (plasma is not clear yellow). To address the discrepancy, a redraw is obtained and new tests are run. Task ID#: 7091021

React to a perceived technical problem by quickly assessing its nature and solution. To perform the task, the medical technologist notes that the results coming from the equipment are questionable according to the quality control values. The technologist deals with this by repeating the quality control process on several patients' tests in order to assess whether the results are consistent. Based upon the results, the technologist prepares fresh quality control samples and reruns these specimens. He or she then performs a series of electronic instrument checks, cleaning, and maintenance procedures and then runs a series of specimens. If the equipment is still faulty, the technologist consults with the supervisor and a maintenance person. Finally, a decision is made either to resort to use of the backup system or wait until the equipment is repaired. Task ID#: 7091351

Responsibility (F13)

Perform all test operations correctly and quickly when the tests impact upon a life and death situation. To perform this task, the medical technologist receives a specimen, such as spinal fluid. The technologist uses the centrifuge on the fluid to separate out the precipitate (i.e., white blood cells, etc). The precipitate is then inoculated into the proper medium. Next, the technologist performs a gram stain which is a quick way to highlight the problem for the doctor. The gram stain is read in a search for bacteria. The results of the gram stain are then reported to the doctor. Finally, the technologist inoculates the petrie dish with the same bacteria to confirm the gram stain results. Task ID#: 7131011

Accurately and responsibly complete the tasks given and ensure the smooth operation of the lab. To perform this task, the medical technologist routinely checks the supplies to ensure that they are adequately stocked and that the lab will not run short of needed supplies. Further, the technologist checks to make sure that none of the chemicals used in the lab have survived their expiration date. Task ID#: 7131021

Complete daily reports accurately. To perform the task, the medical technologist receives a specimen in the lab; verifies that the sample is correct, the quantity is sufficient, and the name on the request matches the name on the specimen; and assigns it a laboratory accession number. Next, the specimen is delivered to the performing technologist for analysis. The technologist again verifies the information to ensure a correct match. He or she then separates the serum from the red blood cells to prepare the sample for analysis; transfers the serum to an analysis cup; programs the equipment to correlate the cup, patient name, and accession number; runs the analysis; and reviews the results to verify their accuracy. This verification is an assessment of the reasonableness of the test outcomes. If the results fall in the serious range, the technologist calls the physician immediately to share the results. Otherwise, a report of the results is sent through the computer system. Task ID#: 7131351

Optician (Based on Four Interviews)

Opticians measure and fit customers with eyeglass frames and contact lenses. They read the prescription of the optometrist to obtain lens specifications. Duties of the dispensing optician may include ordering laboratory work, fitting eyewear, helping with the selection of frames, fitting artificial eyes, and fitting contact lenses.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C07	Interprets and Communicates Information	4.75	.50
C14	Works with Cultural Diversity	4.50	.58
C09	Participates as a Member of a Team	4.00	1.41
C01	Allocates Time	4.00	.82
C06	Organizes and Maintains Information	3.50	1.29
C05	Acquires and Evaluates Information	3.50	1.29
C04	Allocates Human Resources	3.50	1.29
C15	Understands Systems	3.50	1.00
C13	Negotiates to Arrive at a Decision	3.50	1.29
C19	Applies Technology to Task	3.00	1.41
C12	Exercises Leadership	3.00	1.63
C02	Allocates Money	2.75	1.50
C18	Selects Technology	2.75	1.26
C17	Improves and Designs Systems	2.75	1.71
C10	Teaches Others	2.75	1.71
C03	Allocates Material and Facility Resources	2.50	1.73
C16	Monitors and Corrects Performance	2.50	.58
C08	Uses Computers to Process Information	2.00	2.00
C20	Maintains and Troubleshoots Technology	1.75	.96

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	4.75	.50
F03	Arithmetic	4.75	.50
F13	Responsibility	4.75	.50
F06	Speaking	4.50	1.00
F17	Integrity/Honesty	4.50	.58
F15	Social	4.50	.58
F09	Problem Solving	4.25	.50
F14	Self-Esteem	4.00	.82
F16	Self-Management	3.75	.96
F01	Reading	3.75	.96
F11	Knowing How to Learn	3.50	1.73
F10	Seeing Things in the Mind's Eye	3.50	.58
F04	Mathematics	3.25	1.26
F12	Reasoning	3.25	1.50
F08	Decision Making	2.75	.96
F07	Creative Thinking	2.75	1.26
F02	Writing	2.50	.58

Job: Optician

Allocates Time (C01)

Manage and allocate time to achieve productive use and customer satisfaction. To perform this task, the optician files customer records promptly so that when optical items arrive at the shop, customers can be quickly and efficiently notified. The optician also attempts to be at work during peak customer traffic times in order to maximize cost effectiveness. Task ID#: 8011931

Prioritize tasks and set deadlines for their completion. To perform this task, the optician meets with his or her supervisor at the beginning of the work week to discuss the schedule; reviews customer orders to determine if the orders are on time or require follow-up tracking; completes eyeglass lens orders and calls in or sends orders each day to expedite completion; and prioritizes schedule in order to accomplish most important and/or overdue work first. Task ID#: 8012051

Interprets and Communicates Information (C07)

Communicate and interpret problems with doctors, customers, and the office staff. To perform this task, the optician gives the customer a definition of his or her optical problem (e.g., explains the physical need for bifocals, or defines astigmatism); interprets a prescription to determine if it can or cannot be filled based on relevant optical laws; and reports inaccurate or inadequate laboratory work to the proper lab officials. Task ID#: 8071931

Read an eye doctor's prescription for lenses or contacts and transfer information from the prescription form to an order form to be referred by telephone or mail to the optical lab. To perform this task, the optician studies the doctor's lens prescription form taken from the eye exam; transfers information from the prescription form to an order form; calls in the order form information to the optical lab each day; and mails the order form to the optical lab on days when the lab is closed. Task ID#: 8072051

Interpret and communicate information to a variety of audiences. To perform the task, the optician reads a customer's eyewear prescription; interprets the prescription to the customer, explaining the requirements as listed by the ophthalmologist; suggests possible enhancements and options to increase the customer's satisfaction with the product; uses props (various colored eyewear frames and lenses) to convey the image of the finished product to the customer; and contacts the optical laboratory by facsimile with the final eyewear information. Task ID#: 8071561

Teaches Others (C10)

Teach an apprentice optician how to use equipment and tools. To perform this task, the optician teaches the apprentice about basic measurement, fitting of frames, and gathering of pertinent information from customers regarding their lifestyle and eyewear requirements by showing or demonstrating the procedure in question. Task ID#: 8101931

Serves Clients/Customers (C11)

Greet the customer at the counter, gain the customer's confidence, determine how the customer can best be helped, and assist the customer. To perform this task, the optician approaches the customer with a warm and friendly attitude to make him or her feel at ease; determines the customer's needs by intently listening to the customer; demonstrates competence by effectively responding to the customer's questions; periodically asks for and receives feedback from the customer regarding how he or she feels about what has been discussed so far; performs adjustments to eyeglasses or related equipment as promptly as possible; and prepares eyeglass adjustment documents when glasses are to be returned to the lab. Task ID#: 8112051

Negotiates to Arrive at a Decision (C13)

Negotiate with customers and optical laboratory personnel to reach an equitable solution to a sales-related problem. To perform the task, the optician discusses the problem with the customer, suggests possible solutions which are within established store policy, listens to customer suggestions, and generates alternative suggestions which incorporate both store and customer proposals. The optician also solicits suggested solutions from management and, finally, settles the difficulty with as little loss of money and good will as possible. Task ID#: 8131561

Understands Systems (C15)

Use knowledge of the eyeglass fabrication process to dispense high quality eyewear. To perform this task, the optician analyzes and interprets written optical prescriptions to determine lens specifications; measures a customer's facial features; advises the customer of the size and shape of the eyeglasses best suited to his or her features and prescription; assists customers in selecting styles and colors of eyeglass frames and lenses; prepares work orders specifying the information needed by the optical laboratory in order for it to make lenses and mount them in frames; inspects the surface quality and power of the finished lenses in order to verify their conformance to precise tolerances; adjusts the finished eyeglasses on a customer to achieve a comfortable fit; and instructs the customer in use and care of the eyeglasses. Task ID#: 8151871

Know what services can be performed at the store and what must go to the optical lab for adjustment. To perform this task, the optician promptly lets the customer know whether the adjustment can be done at the store or must be sent to the lab; completes forms on items to be returned to the lab and receives items that can be repaired or adjusted at the store; completes the customer's receipt for work to be accomplished; responds to customer requests for the estimated cost of the adjustment or repair; competently uses the store's adjustment tools; and responds to customer requests for information. Task ID#: 8152051

Understand the organizational systems involved in the operation of a retail store. To perform the task, the optician encounters a problem which cannot be settled at the store level; activates the customer service system by contacting a service representative; arranges a meeting between the customer and the representative; attends the meeting and serves as a liaison between the two parties; and follows up with the customer to ensure his or her satisfaction. Task ID#: 8151561

Improves and Designs Systems (C17)

Improve the system to decrease delays in laboratory jobs and improve job flow. To perform this task, the optician selects suppliers who can deliver eyewear items faster, and continues to use the computer to maintain customer/supplier information and to create smoother job flow. Task ID#: 8171931

Selects Technology (C18)

Select the appropriate procedures and tools to adjust eyeglasses. To perform this task, the optician observes the fit of eyeglasses on the patient's face to determine the required adjustments, and selects the tools or equipment needed to make the adjustment. Task ID#: 8181871

Applies Technology to Task (C19)

Adjust glasses, using a variety of tools. To perform this task, the optician adjusts eyeglass lenses in the frame, adjusts the frame itself, tints lenses, or adjusts their spacing. Task ID#: 8192051

Arithmetic (F03)

Compute charges for products and services rendered. To perform the task, the optician computes the prices of various items and services and discusses them with the customer; totals the value after the customer has made final selections; calculates any discounts or additional charges; computes the final cost, including tax; and collects monies due and makes change if needed. Task ID#: 7031561

Measure a customer's facial features to calculate bifocal segment heights. To perform this task, the optician adjusts the sample frame to fit the customer's face; measures the bifocal height and vertical depth of customer's lenses; divides the vertical depth measurement by two; adds/subtracts bifocal height to/from result of the previous step; measures the customer's pupillary distance; and compares the results with measurements of the customer's old eyeglasses to ensure accuracy. Task ID#: 7031871

Measure, compute, and calculate to produce prescribed power for eye wear, using mathematical skills and precision tools. To perform this task, the optician measures the frame to fit the face; measures the lenses to fit into the frame; and calculates the proper measurements to be ground into the prescription lenses. Task ID#: 7031931

Listening (F05)

Pay full attention to the conversations of customers, supervisors, and optical lab technicians to determine their needs. To perform this task, the optician greets customers and listens to them describe the services they wish to have performed; takes direction from his or her supervisor regarding work assignments (or changes in work assignments); receives telephone calls from optical lab technicians regarding specifications or changes to optical orders; and listens to customer complaints or problems associated with eyeglasses or contact lenses. Task ID#: 7052051

Problem Solving (F09)

Determine from the customer exactly what the problem is and seek alternate solutions. To perform this task, the optician asks the customer to explain in detail what the problem is with the eyeglasses or with the order for eyewear; listens intently to what the customer says about the problem; makes correction to the frames of the eyeglasses or adjusts the setting of the lenses, using a variety of instruments; sends incorrect lens prescriptions or other lens problem back to the lab; refers the customer to the appropriate department for billing problems that cannot be resolved at the optical shop; and instructs customers regarding eyeglass care and maintenance in order to enhance their satisfaction with new eyeglasses. Task ID#: 7092051

Knowing How to Learn (F11)

Learn new procedures and adapt them to meet individual needs. To perform the task, the optician receives and reads a copy of a new policy or procedure; attends staff meetings to discuss new work rules; views video presentations on new techniques; and implements new retail store policies. Task ID#: 7111561

Responsibility (F13)

Strive to maintain high levels of customer service, particularly when dealing with customers who are difficult to please. To perform this task, the optician greets a customer promptly and courteously; listens attentively while the customer expresses his or her needs; provides assistance in the selection of lenses and frames; instructs the customer regarding the use and care of eyeglasses; and performs follow up services, such as fixing broken frames, replacing temple screws, and adjusting and refitting eyeglasses. Task ID#: 7131871

Social (F15)

Respond appropriately to customer requests, demonstrate understanding of the customers' needs, and exhibit friendliness and politeness to customers. To perform this task, the optician greets customers in a friendly way; listens to customers' ideas, concerns, and desires; recommends ideas to customers to gain their confidence and to let them know of the optician's knowledge of products and services; demonstrates genuine concern for customers' problems by listening and quickly responding to customer requests; and expedites paperwork or implements other actions immediately. Task ID#: 7152051

Relate pleasantly to staff. To perform the task, the optician maintains open and harmonious relationships with other staff members; forms a professional relationship with the optical laboratory to facilitate needed communication; and displays the ability to interact with staff and laboratory personnel. Task ID#: 7151561

Office, Financial Services, Government

Personnel Specialist (Based on Four Interviews)

Personnel specialists perform administrative tasks in support of hiring, benefits, compensation, training, management support, and recordkeeping. Most tasks are clerical and require data entry and handling.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C08	Uses Computers to Process Information	5.00	.00
C06	Organizes and Maintains Information	4.75	.50
C07	Interprets and Communicates Information	4.50	.58
C09	Participates as a Member of a Team	4.25	.96
C05	Acquires and Evaluates Information	4.00	.82
C15	Understands Systems	4.00	.82
C19	Applies Technology to Task	4.00	1.15
C17	Improves and Designs Systems	3.75	1.89
C12	Exercises Leadership	3.75	.96
C14	Works with Cultural Diversity	3.75	1.50
C13	Negotiates to Arrive at a Decision	3.50	1.91
C01	Allocates Time	3.25	2.06
C10	Teaches Others	3.00	1.15
C16	Monitors and Corrects Performance	3.00	1.41
C04	Allocates Human Resources	2.25	1.89
C03	Allocates Material and Facility Resources	2.25	1.50
C18	Selects Technology	2.25	1.50
C02	Allocates Money	1.25	.50
C20	Maintains and Troubleshoots Technology	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F09	Problem Solving	5.00	.00
F17	Integrity/Honesty	5.00	.00
F06	Speaking	4.75	.50
F16	Self-Management	4.75	.50
F14	Self-Esteem	4.75	.50
F15	Social	4.75	.50
F05	Listening	4.50	.58
F12	Reasoning	4.25	.96
F02	Writing	4.25	.96
F08	Decision Making	4.00	1.41
F11	Knowing How to Learn	3.75	.50
F01	Reading	3.75	.96
F03	Arithmetic	3.25	1.26
F04	Mathematics	2.75	1.71
F07	Creative Thinking	2.75	1.50
F10	Seeing Things in the Mind's Eye	2.25	1.26

Job: Personnel Specialist

Allocates Time (C01)

Identify the daily assignments of both the human resources department and the worker in order to schedule the time frame necessary to complete these assignments. To perform the task, the personnel specialist checks the in-basket, E-mail system, and daily calendar for items to be attended to throughout the day; organizes the workload and divides the work into areas of importance; prepares a daily to-do list; works through the tasks on the list, starting with the highest priority item; schedules meetings, interviews, and workshops to meet necessary deadlines; and assigns co-workers to cover the work station while the specialist attends meetings or conducts workshops and interviews. Task ID#: 8011501

Organizes and Maintains Information (C06)

Collect documentation on a pending situation and organize it into acceptable form according to company policy. To perform this task, the personnel specialist studies a pending situation and decides what documentation is needed to reinforce the company's position; gathers information and documentation from various sources, such as written reports/memos and personnel files stored in computers, and hardcopy files; and puts the information into the computer. Task ID#: 8061701

Receive, sort, delegate, and process paperwork to enroll eligible employees in a profit-sharing program. To perform the task, the personnel specialist receives profit-sharing forms for eligible employees; sorts and reviews the forms for accuracy; checks personnel records to verify hire dates and determine eligibility; schedules a meeting/workshop to explain the profit-sharing plan; advises senior managers and team leaders of meeting/workshop and requests that they arrange for the attendance of eligible employees; conducts the meeting/workshop; collects enrollment forms; enters enrollment information into the computer (or delegates data entry to a co-worker); checks enrollment information to verify accuracy of relevant data; and uses a computerized list of eligible employees to verify that all of them attended the workshop. Task ID#: 8061501

Interprets and Communicates Information (C07)

Interpret and communicate relevant information, such as suggesting revisions to a benefit summary sheet. To perform the task, the personnel specialist identifies a need to clarify the form; discusses the need and recommends improvements; evaluates alternate possibilities for revising the form; prepares a draft incorporating recommended changes; prints and submits a draft copy of the revised form to the supervisor for approval; implements changes; and prints copies of the revised document for the file after receiving the supervisor's approval. Task ID#: 8171501

Uses Computers to Process Information (C08)

Use the computer to process and maintain information. To perform this task, the personnel specialist classifies type of information to be retained; decides which computer system to use; activates the computer or terminal to begin input of information; decides, based on the job to be done, which software package to use; loads the software into the computer and begins input; and edits input to eliminate errors. Task ID#: 8081701

Use the computer for entering and storing work-related materials. To perform the task, the personnel specialist enters and retrieves monthly and quarterly reports, deviations from the budget, information regarding benefits and stock loans, and applicant communications. Task ID#: 8081271

Serves Clients/Customers (C11)

Perform requested services for employees, supervisors, and outside clients. To perform this task, the personnel specialist receives a request for information from an employee, manager, or outside client; decides on appropriate action; checks policy and procedure manuals if necessary to assure compliance with company rules; and notifies employee, manager, or client when action has been completed. Task ID#: 8111701

Exercises Leadership (C12)

Serve as a team leader; distribute work to other team members; check completed work; and have responsibility for accuracy and completeness of work. To perform this task, the personnel specialist receives work through the interoffice mail system; sorts incoming jobs; and delegates assignments to other team members based on the type of service needed; answers questions from team members about assigned tasks; collects completed assignments and checks them for completeness and accuracy, returning those that need corrections; and routes completed jobs to appropriate departments. Task ID#: 8091701

Works with Cultural Diversity (C14)

Respectfully interact with employees, retirees, and applicants regardless of their cultural background. To perform the task, the personnel specialist maintains a respectful relationship with all employees, retirees and applicants from a wide variety of socio-economic and ethnic backgrounds. Task ID#: 8141271

Improves and Designs Systems (C17)

Improve and design human resources systems, such as redesigning a layoff and recall system. To perform this task, the personnel specialist studies the old system to define problems, and highlights needed changes; documents and defines these changes in order to produce the desired results; redesigns programs to incorporate needed changes and updates; reprograms the systems used in layoff and recall procedures; and implements new programs to streamline layoff and recall systems. Task ID#: 8171701

Improve upon the present applicant flow process. To perform the task, the personnel specialist takes steps to improve applicant flow by combining several independent manual tracking systems and setting up an automated database to create an applicant flow system. This system tracks applicants through the various stages of the selection process and maintains statistical information for reporting veterans data, Equal Employment Opportunity Commission (EEOC) information, and other such data. Task ID#: 8171271

Applies Technology to Task (C19)

Enter employee insurance information for new or upgraded programs into a computer . To perform this task, the personnel specialist enters a specified command to bring up the computer menu; picks out a specified correction form on the menu; fills the in blanks on the computer form on screen; and saves the information. Task ID#: 8192121

Select and use the appropriate software for a given task. To perform the task, the personnel specialist chooses from among the different types of software applications available. Task ID#: 8191271

Retrieve the appropriate computer software programs to perform specified tasks To perform the task, the personnel specialist activates the computer, enters the password to retrieve the appropriate software programs, and processes the paperwork using the appropriate software program. Task ID#: 8191501

Reading (F01)

Read and interpret the contracts with various unions involved with the organization. To perform this task, the personnel specialist determines which of the unions having jurisdiction is involved in the personnel action contemplated; accesses the union contract on the computer and checks the index to determine which section applies to the case; reads the union contract to pick out the provisions that apply; and notifies employees, union representatives, and managers of recommended personnel actions by computer-generated memo. Task ID#: 7011701

Writing (F02)

Write memos and other correspondence to convey information and procedures. To perform the task, the personnel specialist reviews the context of correspondence and brainstorms ways to convey a desired message; determines the purpose of a letter; researches and gathers information pertaining to the subject of the correspondence; drafts an outline of the correspondence, prioritizing items to be included; types a draft of the correspondence to express thoughts in written form; scans memos and proofreads for errors in grammar, punctuation, and clarity of content; revises memos to a final form; reprints memos; submits memos to a supervisor for approval; and sends memos to the proper destination. Task ID#: 7021501

Speaking (F06)

Speak to employees about specified problems. To perform this task, the personnel specialist receives an employee; listens to his or her problem; attempts to calm employee if necessary; and takes care of the specified problem. Task ID#: 7062121

Decision Making (F08)

Administer the flow of applicants. To perform the task, the personnel specialist compares each applicant's work experience and skills with the requirements for a given job; administers appropriate tests to the applicant; refers qualified applicants to appropriate departments; and monitors applicant flow with a database to ensure that all of the necessary steps in the process are completed. Task ID#: 7081271

Convey information on personnel-related policies and procedures. To perform the task, the personnel specialist responds to an employee inquiry, listens to the inquiry to ascertain its nature and to extract correct details, considers solutions to the employee's request, selects the most appropriate solution, advises the employee of the selected alternative and the reasons for the decision, and provides the employee with documentation to support the decision. Task ID#: 7081501

Problem Solving (F09)

Use knowledge of company policies and procedures to solve day-to-day problems which arise in the work place. To perform this task, the personnel specialist receives notification of a personnel problem; accesses the documents needed to research the problem; and answers inquiries. If not certain of the correct answer, the personnel specialist contacts the legal department for an opinion. Task ID#: 7091701

Change a family plan to two individual plans. If only one person comes to sign the forms, meaning loss of coverage for the other person, the personnel specialist talks to the person without coverage; has the employee fill out the necessary forms; and keys required information into computer system. Task ID#: 7092121

Responsibility (F13)

Accept responsibility for all levels of insurance problems. To perform this task, the personnel specialist signs people up for insurance; makes changes when needed; and corrects problems. Task ID#: 7132121

Self-Management (F16)

Assign priorities to duties in order of importance so as to accomplish the maximum amount of work per day. To perform this task, the personnel specialist reviews all jobs pending for that day; arranges jobs in order of importance; finishes any jobs left over from the previous day; begins with the most pressing issues or, if these are equal in importance, with the oldest one; and interrupts the normal work flow for emergency situations. Task ID#: 7161701

Integrity/Honesty (F17)

Maintain confidential employee information. To perform the task, the personnel specialist responds to inquiries such as employment verification and salary history in a way that strictly adheres to the company's policies regarding confidentiality. The specialist also maintains a database which offers limited access to employee records. Task ID#: 7171271

Graphic Designer (Based on Four Interviews)

Graphic Designers design art and copy layouts for material to be presented by visual communications media, such as books, magazines, newspapers, television, and packaging. They plan presentations of products, services, or messages to broad audiences.

Competencies		Mean	Std. Dev.
C07	Interprets and Communicates Information	5.00	.00
C11	Serves Clients/Customers	4.75	.50
C01	Allocates Time	4.50	1.00
C19	Applies Technology to Task	4.25	.96
C18	Selects Technology	4.25	.50
C17	Improves and Designs Systems	4.00	.82
C05	Acquires and Evaluates Information	4.00	.00
C09	Participates as a Member of a Team	3.75	1.26
C13	Negotiates to Arrive at a Decision	3.75	.96
C12	Exercises Leadership	3.75	.96
C03	Allocates Material and Facility Resources	3.25	.50
C08	Uses Computers to Process Information	3.25	1.71
C15	Understands Systems	3.25	.50
C06	Organizes and Maintains Information	3.25	.50
C04	Allocates Human Resources	3.25	1.50
C20	Maintains and Troubleshoots Technology	3.00	.82
C16	Monitors and Corrects Performance	3.00	.82
C14	Works with Cultural Diversity	3.00	.82
C10	Teaches Others	2.75	.50
C02	Allocates Money	2.25	.96

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F07	Creative Thinking	5.00	.00
F05	Listening	5.00	.00
F09	Problem Solving	4.50	.58
F10	Seeing Things in the Mind's Eye	4.50	.58
F08	Decision Making	4.25	.50
F17	Integrity/Honesty	4.25	.96
F16	Self-Management	4.25	.96
F01	Reading	4.25	.96
F13	Responsibility	4.00	.00
F12	Reasoning	3.75	.96
F02	Writing	3.75	1.50
F06	Speaking	3.75	1.26
F11	Knowing How to Learn	3.50	.58
F15	Social	3.50	.58
F14	Self-Esteem	3.50	.58
F03	Arithmetic	2.75	.96
F04	Mathematics	2.50	1.29

Job: Graphic Designer

Allocates Time (C01)

Allot the proper amount of time to each component of the project so that the job is finished in time. To perform this task, the graphic designer establishes a time frame based on the complexity of the job and constructs a chart which allocates a certain amount of time for each component of the job; contacts vendors to set up a schedule for completion of the components for which they are responsible; checks periodically to make sure that all components are on schedule; and allows enough time to assemble and fine-tune the project before it is delivered to the client. Task ID#: 8011691

Select projects to be completed, prioritize various activities, and schedule times for each activity. To perform this task, the graphic designer receives project assignments from his or her supervisor; determines priorities among projects and schedules projects accordingly; allocates a time frame for each project depending on these priorities; coordinates work project schedules with other department workers to meet the schedule; and revises the work schedule to meet emergencies and to adjust to project delays. Task ID#: 8012041

Manage concurrent projects. To perform the task, the graphic designer establishes goals for the completion of various projects and taps past experiences to estimate the time needed to complete each project. Next, the graphic designer prioritizes the projects and allocates time to them in order to meet specified deadlines. The designer monitors the projects through completion and readjusts work schedules as needed. Task ID#: 8011201

Interprets and Communicates Information (C07)

Gather information for projects from many sources, interpret it in the context of the current project, and communicate it to vendors, photographers, printers, and clients. To perform this task, the graphic designer assembles information related to the current project from various sources and classifies information by subject and context; decides what information will be needed for the current job, based on the slant it is expected to take; and communicates to vendors information enabling them to complete their part of the jobs. Task ID#: 8071691

Analyze customer information and communicate ideas through graphic or pictorial methods. To perform this task, the graphic designer reviews customer information and determines the best methods for meeting the customer's needs; identifies the best method for presenting the information; completes a rough draft of the ideas; discusses the idea interpretation with the customer (using rough draft sketches); makes revisions, incorporating customer's feedback; and prepares final sketches. Task ID#: 8072041

Uses Computers to Process Information (C08)

Create and present solutions for design problems. To perform the task, the graphic designer enters the relevant design information into the computer, using desktop publishing software and/or computer-assisted design. The designer then creates a design to meet the needs of the client. The design ideas generated are presented to the client for feedback and approval. After receiving feedback, the designer refines the design and presents the finished product to the client. Task ID#: 8081201

Participates as a Member of a Team (C09)

Meet with different groups to share ideas and skills. To perform the task, the graphic designer meets with the account department to obtain information concerning the client's needs. The designer also brainstorms with the copywriters to generate ideas for the new advertising account; obtains writers' opinions on suggested advertising layouts; reads writers' copy to ensure consistency with the layout; and talks with the production department to ensure that all production-related deadlines are met. Finally, the designer knows when to contact the production department to coordinate the purchase of typesetting and engraving. Task ID#: 8091211

Serves Clients/Customers (C11)

Work and communicate to satisfy the client's expectations. To perform this task, the graphic designer actively listens to the customer's ideas and takes notes; determines the feasibility of completing the project; communicates ideas to the customer and estimates for the customer the cost of the project; completes a rough draft of ideas; reviews rough drafts with the customer to get the customer's input regarding revisions or the customer's approval to proceed with the project; and communicates regularly with the customer until the final draft drawings are completed and sent to the printer. Task ID#: 8112041

Exercises Leadership (C12)

Use leadership skills to convince others that change and evolution are not only necessary but desirable. To perform this task, the graphic designer studies a proposed job to determine the client's needs, and considers various methods for effectively achieving the desired results; presents the proposal to the client in a positive and persuasive manner; convinces the client to be open to new and different concepts; and motivates clients, staff, and vendors to do the best job possible. Task ID#: 8121691

Understands Systems (C15)

Know where to go to get needed information. To perform the task, the graphic designer contacts a variety of individuals to obtain the information necessary to best serve the client. For instance, the designer shares ideas with writers, obtains a detailed interpretation of the client's needs from the account department, and gathers information on potential consumers through the research department. Further, the designer knows where to get supplies and how to order them and is able to identify the best source for the supplies. Finally, the designer knows where to locate photographers. Task ID#: 8151211

Monitors and Corrects Performance (C16)

Evaluate initial rough drafts and determine changes to be made for final drafts. To perform this task, the graphic designer identifies problem areas in rough drafts through discussions with the customer and thorough review of drawings, and corrects the drawings to meet the customer's expectations. Task ID#: 8162041

Improves and Designs Systems (C17)

Design a quality control system which uses both the human and mechanical components of the organization. To perform this task, the graphic designer ascertains what quality control measures are now in effect and determines what portions of the system should be changed to effect a better method of quality control; designs an improved system for quality control, using new methods of recordkeeping and increased personal responsibility; and checks periodically to make sure that the new system is being used as designed, and that the method is effective. Task ID#: 8171691

Selects Technology (C18)

Determine which technology would be most effective based on the needs of the project. To perform this task, the graphic designer evaluates the client's needs; determines what types of graphics will be needed; uses knowledge of the technology available in order to decide which system is best for the current job; and uses designated software to run a suitability test. Task ID#: 8181691

Determine which tools could best accomplish the work required to meet the goals of the project. To perform this task, the graphic designer reviews the customer's ideas; evaluates the methods/tools to be used to accomplish the project; chooses particular tool or method to be used to produce rough drafts; and looks at the customer's project, rough drafts, and alternate printing methods and determines which method would best accommodate the project. Task ID#: 8182041

Reading (F01)

Read copy submitted by client. To perform this task, the graphic designer reads copy or a manuscript sent by the client to determine the graphic concept best suited to the job; breaks the copy down into its component parts to discover the basic objective; and examines the copy, looking for visual metaphors (graphic images which convey the underlying idea). Task ID#: 7011691

Listening (F05)

Gain an exact understanding of the customer's needs by listening intently to the ideas that the customer has. To perform this task, the graphic designer listens to the customer's ideas regarding the project; queries the customer to clarify these ideas and to obtain additional ideas; and assesses the customer's ideas to determine the feasibility of possible plans. Task ID#: 7052041

Listen to a client during a meeting to ascertain the client's needs. To perform this task, the graphic designer listens to a client in order to gather information on the client's needs and the product to be advertised; listens to a description of relevant market trends and demographic data presented by the research department; determines how consumers will ultimately view the product; formulates advertising ideas based on the market trends and the client's needs. Task ID#: 7051211.

Creative Thinking (F07)

Remove mental barriers which prevent the full expression of ideas. To perform this task, the graphic designer concentrates on text, formulates graphic images, considers various graphics approaches to the subject; uses graphic materials in the files or sketches to formulate different ideas for illustrating the piece; and alone or in consultation with co-workers chooses the graphic images which seem best suited to the project. Task ID#: 7071691

Gather ideas for the project by allowing one's imagination to freely associate with any subject related to the client organization, or its products. To perform this task, the graphic designer researches ideas at various libraries; leaves an idea and goes back to it later if necessary for creative stimulation; and tries to create practical applications of ideas in the form of rough draft drawings. Task ID#: 7072041

Develop design ideas from scratch. To perform the task, the graphic designer determines the client's basic need and develops a concept which lends itself to advertising. Basically, the designer views the concept from many different viewpoints and tries to offer an innovative interpretation that is intriguing, attractive, and exciting. The designer also develops ideas that exhibit contrast or incongruity. Ultimately, the designer generates and refines a final idea. Task ID#: 7071211

Decision Making (F08)

Decide how to best correct a photograph in which some of the color is incorrect. To perform the task, the graphic designer knows enough about engraving and retouching processes to determine the best procedure for the color correction. The designer determines who can do the job at the best price and who would fit a specific job. After these decisions have been made, the designer arranges to have the photograph corrected by the selected vendor. Task ID#: 8181211

Seeing Things in the Mind's Eye (F10)

Visualize the finished product from unrelated parts, such as the manuscript, graphics supplied by the client, graphics taken from files, sketches, or photographs. To perform this task, the graphic designer reviews the manuscript to develop a graphics concept; assembles graphic materials to test various approaches to the finished product; tests various graphics concepts in conjunction with the manuscript and decides which concept best conveys the desired idea or information. Task ID#: 7101691

Self-Management (F16)

Assess one's own attributes accurately, set realistic goals, and exhibit self-control by responding to feedback. To perform this task, the graphic designer assesses the work to be done over a specified period of time; sets realistic goals for accomplishing the work; demonstrates self-control when customers disagree with his or her ideas; and revises time schedules to allow for reworking projects. Task ID#: 7162041

Integrity/Honesty (F17)

Be honest with oneself, have self-esteem, and exhibit personal integrity with regard to work-related activities. To perform the task, the graphic designer performs each job in the best possible manner, thus providing the client with a quality product. Along with this, the designer must honestly appraise his or her own abilities. Finally, the designer must learn all of the skills necessary for successful job performance. Task ID#: 7171211

Computer Operator (Based on Five Interviews)

Computer operators monitor and control electronic computers to process business, scientific, engineering, or other data, according to operating instructions. They operate systems by ensuring that correct input is supplied on time, correct programs are seen, and problems are resolved, producing correct on time output, updates, or reports.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	4.80	.45
C01	Allocates Time	4.60	.89
C09	Participates as a Member of a Team	4.40	.89
C15	Understands Systems	4.40	.89
C20	Maintains and Troubleshoots Technology	4.40	.55
C19	Applies Technology to Task	4.40	.89
C16	Monitors and Corrects Performance	4.20	.84
C10	Teaches Others	4.20	.84
C08	Uses Computers to Process Information	4.20	1.30
C14	Works with Cultural Diversity	3.60	1.67
C03	Allocates Material and Facility Resources	3.40	.89
C07	Interprets and Communicates Information	3.20	1.79
C12	Exercises Leadership	3.00	1.22
C06	Organizes and Maintains Information	3.00	1.22
C17	Improves and Designs Systems	2.80	1.48
C18	Selects Technology	2.80	1.48
C13	Negotiates to Arrive at a Decision	2.60	1.14
C05	Acquires and Evaluates Information	2.60	1.34
C04	Allocates Human Resources	1.80	.84
C02	Allocates Money	1.20	.45

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F01	Reading	5.00	.00
F02	Writing	4.80	.45
F09	Problem Solving	4.80	.45
F17	Integrity/Honesty	4.60	.55
F05	Listening	4.60	.55
F06	Speaking	4.40	.55
F11	Knowing How to Learn	4.40	.55
F12	Reasoning	4.20	.84
F16	Self-Management	4.20	.84
F15	Social	3.80	1.10
F14	Self-Esteem	3.60	1.14
F10	Seeing Things in the Mind's Eye	3.60	.89
F08	Decision Making	3.60	1.14
F07	Creative Thinking	3.00	1.00
F03	Arithmetic	2.60	.89
F04	Mathematics	1.80	.84

Job: Computer Operator

Allocates Time (C01)

Use time efficiently to complete tasks. To perform this task, the computer operator makes sure that jobs are completed in an efficient and timely manner; makes decisions regarding jobs to be run based on experience and knowledge of time requirements for each report; decides when scheduled maintenance on mainframe can be done based on number and priorities of jobs; and schedules extra runs and updates to fill mainframe time. Task ID#: 8011741

Allocate time to ensure timely delivery of output. To perform this task, the computer operator checks the priority code on a daily basis, sets the printer according to the priority codes, monitors the flow of codes and job operation, clears printers according to time set, and breaks and distributes reports. Task ID#: 8011441.

Prioritize and rectify problems in the order of their importance. To perform this task, the computer operator listens to the manager and makes a list of the daily problems; prioritizes problems; and takes action to alleviate problems. Task ID#: 8011951

Determine how many jobs must be done within a specified time frame to meet deadlines. To perform the task, the computer operator determines which jobs are contingent on time of day and/or relate to other scheduled jobs. The operator consolidates these job requirements to ensure that everything is accomplished by the end of the shift. Further, the operator must determine how to rearrange the operating schedule to work special requests into the daily schedule. Task ID#: 8011221

Allocates Material and Facility Resources (C03)

Ensure that the inventory has been updated. To perform the task, the computer operator reviews the list of required supplies and takes the steps necessary to obtain them, including obtaining supervisory approval and writing a requisition. Task ID#: 8031041

Interprets and Communicates Information (C07)

Receive information from customer, interpret it, and communicate it to other personnel as needed. To perform this task, the computer operator receives information on a computer screen; decides on disposition of the information; prepares a printout or verbally communicates to staff the information received; and, to assure written documentation, enters information received and date and time of receipt into an operations log. Task ID#: 8071741

Make entries into the operator's log to communicate the day's activities and problems. To perform the task, the computer operator determines the existence of problems by interpreting readouts located on the computer's monitor screen. The operator documents the nature of the problem in a log, accurately describing the details involved. Further, the operator communicates the problem to the user. Task ID#: 8071221

Uses Computers to Process Information (C08)

Enter information into the mainframe computer as directed by systems analysts and programmers. To perform this task, the computer operator evaluates the job to determine the most effective method of processing; initiates a test run to check on the program and setup; makes changes in the program to facilitate the job run; and monitors the run periodically to make sure it is running as programmed. Task ID#: 8081741

Conduct the processing of a "pre las" job. Pre las is a test for elementary students. To perform the task, the computer operator acquires the tape containing the pre las data. The operator refers to the manual for pre las operating instructions, loads the pre las tape into the system, logs into the account to run the job, and runs the tape. When the running of the system tape is completed, the operator creates pre las reports and labels and has them printed on the appropriate printers and packaged for the user. Task ID#: 8081041

Understand how the mainframe computer works. To perform this task, the computer operator submits a job by loading the tape and keying correct commands into the terminal; prints output of the job and checks it for errors; and contacts the requestor of the job for correction of errors. Task ID#: 8151951

Participates as a Member of a Team (C09)

Work with the systems analyst, programmer, computer operators, and data entry clerks. To perform this task, the computer operator receives data from the data entry clerks for inclusion in the job runs; receives corrections to the job from the systems analyst; receives the job to be run on the mainframe computer from the programmer; and assists the other computer operators with problems, working as a team when such emergencies arise as computer jams or failures. Task ID#: 8091741

Teaches Others (C10)

Cooperate with co-workers to complete input and output to meet schedules. To perform the task, the computer operator coordinates his or her work activity with co-workers in order to mount and file tapes; monitors operation of jobs by observing console screen and responding to messages; and coordinates work activity with co-workers to print and burst reports. Task ID#: 8091441

Teach users how to operate the computers. To perform this task, the computer operator shows the user how to start the computer system and how to pick a program application (e.g., LOTUS) from the menu; explains the application usage; and shows the user how to shut down the computer. Task ID#: 8101951

Serves Clients/Customers (C11)

Serve the needs of the customer. To perform this task, the computer operator may divide a job into segments to ensure that information is available to a customer when needed. The operator conforms strictly to the schedule for delivery of reports and information; answers any questions which a customer has about computer printouts and runs; assists the customer when special runs are needed; and troubleshoots a telecommunications network when problems arise. Task ID#: 8111741

Install a printer for a user who is not computer literate. To perform the task, the computer operator introduces himself or herself to the user who is receiving the equipment. The operator assesses the user's level of understanding of computers and adjusts the explanatory terminology accordingly. Next, the individual installs the printer and explains its operation to the user. Task ID#: 8111041

Listen to a customer to ensure that a specific problem is resolved without miscommunication and misunderstandings. To perform the task, the computer operator listens to the customer's description of a given problem, communicating with the customer in a positive manner and appearing competent and confident. After obtaining this information, the operator investigates and resolves the problem. When the problem does not appear to be with the mainframe (the operator's area of responsibility), the operator tactfully asks the customer to investigate his or her computer network. Task ID#: 8111221

Understands Systems (C15)

Add a new terminal to an existing network. To perform the task, the computer operator responds to a request from upper management to add a new terminal to an existing network. The operator determines the potential users and purpose for the terminal to assure access to the appropriate systems. Next, the operator installs the terminal and network cable, tests the terminal for access to the desired systems, enters the network operating system, and adds the user to the system. Task ID#: 8151041

Understand the workflow as a whole, including how the activities and actions of all shifts fit together and how the workflow affects customers and others. To perform the task, the computer operator knows the importance of accuracy and quality as they relate to the goal of 100 percent system availability to user. The operator also understands the ramifications of errors when availability falls below 100 percent. Further, the operator knows the right people from whom to receive assistance to meet the 100 percent goal.

Finally, the operator knows how all operations relate to each other. For instance, the operator understands how the actions of the day shift will affect the reports of the night shift. Task ID#: 8151221

Monitors and Corrects Performance (C16)

Modify the operating system to accommodate the users' needs. To perform the task, the computer operator receives a memo indicating a change to the operating system; determines the modifications needed in the system to accommodate the change; and implements the change to the system. Task ID#: 8161441

Applies Technology to Task (C19)

Decide what type of computer system (PC or mainframe) to use depending on the type of application. To perform this task, the computer operator obtains requests from users in memo form; decides what system to use; runs specific applications on specified computers; prints output; and sends output to users. Task ID#: 8191951

Set up the input and output devices according to daily job needs and schedules. To perform the task, the computer operator checks the flow of the jobs and priority codes, loads devices, and operates the devices to produce input and output. Task ID#: 8191441

Maintains and Troubleshoots Technology (C20)

Perform preventive maintenance on printers. To perform the task, the computer operator selects the printer to be serviced, obtains the necessary tools and supplies, and uses these tools and supplies to clean the printer and change the ribbon. Finally, the operator puts the printer back in operation. Task ID#: 8201041

Maintain an on-line network for credit unions and Automated Teller Machines (ATM's). To perform the task, the computer operator monitors the computer operations of credit unions and ATMs and is able to understand and determine when equipment is not working properly. After determining that a problem exists, the operator follows specific written procedures to determine the nature of the problem. These procedures are dependent upon the type of equipment in question. The operator follows specific procedures for correcting the problem and, if unable to resolve it, notifies a senior-level person (such as a senior operator or supervisor). Task ID#: 8201221

Reading (F01)

Read technical manuals, updates from manufacturers, correspondence, and printouts. To perform this task, the computer operator reads technical manuals to learn steps needed to operate mainframe computer; reads correspondence from the manufacturer to keep current on technical and electronic changes in the mainframe; reads and interprets interoffice correspondence; reads computer monitors to ensure messages are being correctly transmitted; and proofreads output of the computer printer to check for placement and errors. Task ID#: 7011741

Follow a basic written schedule of activities to be performed. To perform the task, the computer operator reviews the problem log at the beginning of the work shift so as to become familiar with the previous shift's activities. The operator also reads a printed schedule listing the day's jobs. The operator reviews procedures manuals in order to learn how to do each job, how to recover data, and how to reload files. Following the instructions in the manual, the operator is able to run the appropriate program and to distribute output, reports, and tape. Task ID#: 7011221

Writing (F02)

Write computer operations procedures, and memos requesting changes in procedures, to ensure that all functions operate properly. To perform the task, the computer operator reads and reviews previous documentation of a computer operation procedure; outlines a draft of the recommended procedure; requests assistance from other operators to proof the drafted procedure and provide suggested revisions; writes the procedure in final form; submits the procedure to supervisors for approval; and implements the procedure. Task ID#: 7021441

Decision Making (F08)

Decide the order of jobs to be run based on priorities set by the customer and on information given to the operator. To perform this task, the computer operator checks the log for jobs waiting to be put into the computer; arranges in order of importance the jobs to be run; checks the computer monitor to be sure that the last job has completed its run; loads jobs on the computer in a predetermined order; and determines if a job is important enough to comply with a user's request for a run interruption. Task ID#: 7081741

Problem Solving (F09)

Rectify a bad backup tape. To perform this task, the computer operator removes the bad tape from the tape drive; loads a new tape onto the tape drive; enters commands into the terminal to start the new tape; and calls for service if he or she cannot rectify the problem. Task ID#: 7091951

Resolve the situation which emerges when the computer tape indicates a parity error (an error in a communications command). To perform the task, the computer operator identifies the existence of a parity error. The operator immediately contacts his or her supervisor and follows the supervisor's instructions for solving the problem. This includes getting supervisory permission to apply a solution generated by the operator. After receiving supervisory permission, the operator unloads the tape and ensures that it is the current one. Next, the tape drive is cleaned, the tape is reloaded, and a test reading is performed. If an error still exists, the operator contacts data control to recreate the tape. The newly created tape is then reloaded. Task ID#: 7091041

Solve the problem which results in a program not running as specified. To perform the task, the computer operator first recognizes that a problem exists. Next, the operator reviews the output displays to ensure that the program had been properly executed and compares the program with the specifications of the operations procedures manual to ensure that it was run correctly. The operator enters commands into the computer to learn whether or not the program is new or whether an unworkable change had been added to a program. Based upon the results of these investigations, the operator re-executes the program. Finally, the operator contacts the programming staff if the problem is program related. Task ID#: 7091221

Define, identify, and resolve systems problems to a user's satisfaction. To perform the task, the computer operator receives a complaint from the user, researches the problem area, defines the problem, and identifies the end result or goal needed to resolve the problem. The operator then determines alternative methods to solve the problem, experiments with a system's operation and with peripheral equipment such as printers and tape drives, and selects the most appropriate method to solve the problem. After implementing the corrected procedure, the operator evaluates the user's satisfaction with the solution. Task ID#: 7091441

Identify, analyze, and communicate a hardware or systems problem to technical or managerial personnel. To perform the task, the computer operator identifies a systems or hardware problem; analyzes the source of the problem; reports the problem to appropriate technical or managerial personnel; documents the malfunction of the operating system or other problem in the information system records; and prints hard copies for the files. Task ID#: 8081441

Responsibility (F13)

Assume responsibility for the arrangement and completeness of jobs run on the mainframe computer. To perform this task, the computer operator checks programs to make sure that they are complete and that relevant forms provide needed output; makes required entries into the operations log to document programs run on the mainframe; checks with customers on discrepancies that appear during the program run; makes sure that all security requirements are adhered to and enforced during all program runs; and monitors and records all mainframe use during the shift. Task ID#: 7131741

Display punctuality and good attendance at work. To perform the task, the computer operator takes responsibility for coming to work on time and when scheduled. The operator also takes responsibility for work to be done within a specified time frame. Task ID#: 7131221

Social (F15)

Troubleshoot a user's hardware problem. To perform the task, the computer operator first receives a telephone call or other user contact referencing a hardware problem. The operator assures the user that assistance will be available promptly. After obtaining supervisory approval to deal with the user, the operator meets the user at the location of the problem, selects the appropriate terminology for communicating with the user (depending upon his/her level of understanding of computers), and discusses the nature of the problem. The computer operator troubleshoots the problem and communicates findings to the user, assuring the user, if possible, that the problem is fixed. If unable to deal with the problem, the operator attempts to obtain assistance from another source. Finally, the operator follows up to ensure that the user is satisfied and the problem is solved. Task ID#: 7151041

Programming Technician (Based on Four Interviews)

Programming technicians code computer programs from well-defined flow-charts. Under supervision of managers or higher level programmers, they may perform program maintenance, and limited program modification, set up routine test runs and integration runs, develop simple test cases, analyze results, and make limited corrections. Programming technicians document their own work.

Competencies		Mean	Std. Dev.
C19	Applies Technology to Task	5.00	.00
C11	Serves Clients/Customers	5.00	.00
C01	Allocates Time	5.00	.00
C15	Understands Systems	4.75	.50
C20	Maintains and Troubleshoots Technology	4.75	.50
C07	Interprets and Communicates Information	4.50	.58
C08	Uses Computers to Process Information	4.50	1.00
C05	Acquires and Evaluates Information	4.25	.96
C06	Organizes and Maintains Information	4.25	.50
C10	Teaches Others	4.25	.50
C17	Improves and Designs Systems	4.25	.96
C18	Selects Technology	4.25	.96
C16	Monitors and Corrects Performance	4.25	.96
C09	Participates as a Member of a Team	4.00	.82
C12	Exercises Leadership	4.00	1.15
C04	Allocates Human Resources	3.75	.50
C14	Works with Cultural Diversity	3.75	.96
C13	Negotiates to Arrive at a Decision	3.25	.96
C03	Allocates Material and Facility Resources	2.25	.50
C02	Allocates Money	2.00	.82

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F01	Reading	5.00	.00
F09	Problem Solving	5.00	.00
F06	Speaking	4.75	.50
F05	Listening	4.50	.58
F16	Self-Management	4.50	.58
F08	Decision Making	4.50	.58
F13	Responsibility	4.50	.58
F12	Reasoning	4.25	.50
F15	Social	4.25	.96
F03	Arithmetic	4.25	.96
F02	Writing	4.25	.96
F14	Self-Esteem	4.00	.82
F17	Integrity/Honesty	4.00	1.41
F11	Knowing How to Learn	3.75	.50
F07	Creative Thinking	3.75	.96
F04	Mathematics	3.75	.96
F10	Seeing Things in the Mind's Eye	3.50	.58

Job: Programming Technician

Allocates Time (C01)

Finish writing a computer program in a specified time. To perform this task, the programming technician estimates the amount of time required to write a computer program; breaks down the program writing task into major components; estimates the time required to complete each component; develops a timeline (a graphic aid to display actual progress and initial deadlines); identifies problem areas and areas that went better than expected; and shifts attention to problem areas. Task ID#: 8011821

Plan one's own schedule. To perform this task, the programming technician records appointments on a calendar; plans administrative time for the week (i.e., time sheets, expenses, mail); receives input from salespeople about sales calls; evaluates preparation time needs for different appointments; adjusts appointment dates, if necessary; and follows the schedule. Task ID#: 8011851

Define a schedule for an initial study. To perform this task, the programming technician determines the magnitude of the project and the resources available; develops a rough draft of the schedule, using project management software; refines the schedule with management and checks for any organization deadlines; and prints the schedule and distributes it to staff. Task ID#: 8011991

Prepare a time-cost estimate for a task/change. To perform this activity, the programming technician identifies the process being affected by the task/change; identifies the priorities for handling the task/change; allocates time for each stage of the task/change process based on priority levels; and develops a time-cost estimate based on time allocated to the programmer, central processing unit, and printer costs. Task ID#: 8012001

Acquires and Evaluates Information (C05)

Acquire input from the user to implement a new system. To perform this task, the programming technician prepares and distributes a table layout of the old system; sends out requests to users for table analysis reports; reviews responses from users; verifies the findings by scanning the source code of the current system; discusses the findings with the users and the applications programmers; evaluates the validity of the findings; and publishes the results for final approval. Task ID#: 8052001

Organizes and Maintains Information (C06)

Maintain customer files. To perform this task, the programming technician sets up a file for every site (file labels, space for file, etc.); determines what information is to be maintained in each file; sets up a system among systems engineers to update files (i.e., circulate milestone charts for systems engineers to update the status of projects); sets up future planning for sites (i.e., additional training needs); locates a storage place for files; and designs a method for retrieving information that can be used by those not familiar with the system. Task ID#: 8061851

Interprets and Communicates Information (C07)

Prepare a financial report for the business staff. To perform this task, the programming technician determines the data needs of business staff by asking them about their reporting requirements; retrieves the needed data and formats it into a readable report; and provides the data to the business staff, both in hard copy and on a floppy disk. Task ID#: 8071821

Uses Computers to Process Information (C08)

Use a computer to resolve an application malfunction. To perform this task, the programming technician logs onto the mainframe computer to determine the problem; retrieves the necessary information to identify the problem; transmits data from various computer systems to help with identification; arrives at a solution; transmits corrective software back to the production system; and monitors the new application to verify the solution. Task ID#: 8081991

Teaches Others (C10)

Train new members of a group. To perform this task, the programming technician orients the new members to the responsibilities and functions of the group; presents a brief technical preview of the computer systems; coaches new members on development of new software; helps new members resolve production malfunctions; and introduces new members to critical employees. Task ID#: 8101991

Serves Clients/Customers (C11)

Install computer systems. To perform this task, the programming technician calls the customer to coordinate installation and logistics activities (where to stay, directions to the site); confirms that the hardware is on site with the field engineer; installs the software; schedules/conducts customer's training (for getting information from the old system onto the new system); documents the proficiency of customer training and requests evaluations while on site; troubleshoots the problems that occur on "live day" (when a system becomes operational); and writes a trip report. Task ID#: 8111851

Verify a report at the request of a user. To perform this task, the programming technician responds to a user's request by explaining how the data is being processed; runs test jobs to simulate the process/report being requested; analyzes the data by running a job; and presents the findings to the user for verification. Task ID#: 8112001

Understands Systems (C15)

Understand a customer's organization and its procurement process by working on the account over a long period of time. To perform this task, the programming technician determines who the organization's decision makers are; what computer systems are currently in use; how the technician's organization relates to those systems; what the customer's procurement process is; what the customer plans in the area of systems developments; and where the systems engineers of the technician's organization can be of service. Task ID#: 8151851

Implement an enhancement to the current system. To perform this task, the programming technician studies the impact of the enhancement to the current system; locates the source code affected by the enhancement; sets up a test job and creates test data for verification of the new system; requests data from other companies, if necessary; runs the test job with the required data; compares the results before and after the change; and notes differences. Task ID#: 8152001

Improves and Designs Systems (C17)

Transfer time share system from an old computer to a new and faster computer. To perform this task, the programming technician defines the peripheral devices needed for the new system (e.g., printers, tape drives, disk drives); sets up the new system (hooks up machines); ensures that the hardware peripherals are compatible and function correctly; installs most recent version of the operating system; transfers data from the old system to the new system; thoroughly tests all programs on the new system; debugs programs that are not running correctly; sets interactive limits (to ensure that the system will operate with the specified number of users); and opens the system to new users (i.e., gives users new telephone numbers, lets them know that the new system is available). Task ID#: 8171821

Selects Technology (C18)

Help the user define hardware and software requirements for database application. To perform this task, the programming technician determines the size of the database in order to define the requirements of the storage hardware (i.e., size of the hard drive); determines how many users will need to access the system simultaneously; determines how quickly data need to be retrieved; and chooses the hardware, operating system and database software. Task ID#: 8181821

Applies Technology to Task (C19)

Apply technology (software) to a customer's problem. To perform this task, the programming technician listens to the customer describe the problem and determines what critical data is required; understands the technology given to the customer (how it works, what it will generate); and fits application to the customer's problem. Task ID#: 8191851

Implement a newly developed project into the production system. To perform this task, the programming technician completes documentation to begin the implementation; starts the process of transmitting the application project into the production system; revises jobs based on recommendations; logs into the production machine and validates the transmittal of jobs; verifies the installation of the online software; monitors jobs running under the new software; and corrects application where necessary. Task ID#: 8191991

Maintains and Troubleshoots Technology (C20)

Test the new release of an information management system. To perform this task, the programming technician studies the differences between the new release and the old system; defines testing requirements based on the differences; creates test data to cover all of the possible outcomes; runs the test jobs; identifies discrepancies between the test results and the trace findings; obtains additional help from database administrator, if necessary; and publishes results. Task ID#: 8202001

Reading (F01)

Determine the cause of an error message. To perform this task, the programming technician reads an error message to determine where the problem is (i.e., the operating system or the software); locates the master index in the manuals; finds the error message in the index; looks for other terms that mean the same as the error message; finds these terms in the index; reads the section in the manual specified in the index; finds key topics in the manual and references other appropriate sections; determines the cause of the error by reading material in the manual; and fixes the program according to the manual. Task ID#: 7011821

Writing (F02)

Prepare an initial study document for presentation to a technical oversight committee. To perform this task, the programming technician contacts the committee to set up a project identification; analyzes current system; prepares a rough draft of the document; develops a logical data model; refines the document to correct information; sets up a walk-through date with the committee; presents the committee with documentation; and revises the document based on the committee's decisions and suggestions. Task ID#: 7021991

Speaking (F06)

Make a presentation to a client to sell a computer. To perform this task, the programming technician researches various kinds of software and computer systems to ensure adequate knowledge; organizes the data in a logical order to develop a flow of presentation; organizes the points to be stressed (i.e., what the customer is interested in); coordinates the logistics of the presentation (i.e., materials, room setup); and delivers the presentation, using appropriate body language and spoken words. Task ID#: 7061851

Problem Solving (F09)

Make a program run more quickly. To perform this task, the programming technician documents how long it takes to run the program without modification (i.e., sets up a baseline); identifies how the program's input affects running time; determines if input can be modified to make the program run more efficiently; isolates the portion of the program that is most time consuming; rewrites that portion; reruns the program and compares the new run time with the baseline run time; and if reduction in run time is not sufficient, rewrites the program. Task ID#: 7091821

Manage the product center so that customers can come in and look at or use the equipment. To perform this task, the programming technician recognizes that the systems engineers (SEs) and salespeople need the same equipment, documentation and software; presents solutions to the manager (e.g., development of a product center and SE's library); establishes policies for the SE library; establishes policies for the product center so that the customers can see demonstrations of the equipment; and monitors adherence to policies (e.g., determines if salespeople are using sign-out sheet). Task ID#: 7091851

Correct malfunctions of applications software. To perform this task, the programming technician receives a message about a problem with a particular applications software; logs into the mainframe computer and analyzes the output for discrepancies; determines the source of the problem; develops a small-scale test of a resolution of the problem; verifies the test results for the correct solution; contacts management about the recommended solution; implements the solution into the mainframe system; and monitors the application to verify that the results are correct. Task ID#: 7091991

Responsibility (F13)

Be team leader for a study project. To perform this task, the programming technician establishes a responsibility schedule; assigns duties, without bias, to subordinates; maintains optimism and enthusiasm throughout the course of events; sets high standards for staff work expectations; monitors the progress of the group based on the established time frames; and reports project status to management. Task ID#: 7131991

Coordinate testing of the new release of an information management system. To perform this task, the programming technician actively participates in meetings with staff members; volunteers to gather information to assist with the testing; compiles information and distributes it to the administrator; assists co-workers to determine the task schedule; runs tests; and shares test findings with co-workers. Task ID#: 7132001

Social (F15)

Train users informally how to use programs. To perform this task, the programming technician determines how familiar users are with the software by asking them about their experience with it; determines if the problem can be resolved over the telephone or if a personal meeting is necessary; schedules a meeting if the problem cannot be solved over the telephone; ensures availability of training materials (e.g., videotapes, training guides, tutorials); meets with the user and watches him or her use the program; determines the user's specific problems; and explains to the user how to use the program correctly. Task ID#: 7151821

Self-Management (F16)

Plan for promotion/career advancement. To perform this task, the programming technician reviews job descriptions at higher levels to determine the skills needed; defines shortcomings (skills not possessed); plans the education necessary to acquire the skills; does activities of the higher-level job and documents these activities; presents a list of the completed activities to the supervisor at performance appraisal; discusses future goals with the supervisor; and arranges for periodic review of goal attainment. Task ID#: 7161851

Accounting/Financial Analyst (Based on Four Interviews)

Accounting/financial analysts are responsible for creating, validating, and explaining financial controls in accounts receivable and payable; cost accounting; and accounts of internal departments. They participate in the analysis and consolidation of financial data in support of decisions involving business plans, short- and long-range revenue and expense plans, product strategy, pricing, policy, and financial measurements. They rely on basic financial practices and established procedures to perform their jobs.

Competencies		Mean	Std. Dev.
C05	Acquires and Evaluates Information	4.50	.58
C01	Allocates Time	4.50	.58
C07	Interprets and Communicates Information	4.50	.58
C15	Understands Systems	4.25	.50
C08	Uses Computers to Process Information	4.25	.96
C06	Organizes and Maintains Information	4.25	.96
C09	Participates as a Member of a Team	3.75	.96
C16	Monitors and Corrects Performance	3.75	.96
C02	Allocates Money	3.50	1.73
C18	Selects Technology	3.25	.96
C13	Negotiates to Arrive at a Decision	3.00	.82
C14	Works with Cultural Diversity	3.00	.82
C12	Exercises Leadership	3.00	.82
C10	Teaches Others	2.75	.50
C11	Serves Clients/Customers	2.75	1.50
C04	Allocates Human Resources	2.25	.96
C03	Allocates Material and Facility Resources	2.25	.50
C19	Applies Technology to Task	2.25	.96
C17	Improves and Designs Systems	2.25	.50
C20	Maintains and Troubleshoots Technology	2.00	1.15

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F09	Problem Solving	4.50	.58
F03	Arithmetic	4.50	1.00
F12	Reasoning	4.25	.50
F08	Decision Making	4.25	.50
F17	Integrity/Honesty	4.25	.50
F13	Responsibility	4.25	.96
F01	Reading	4.25	.96
F16	Self-Management	4.00	1.15
F15	Social	4.00	.82
F05	Listening	3.75	.96
F04	Mathematics	3.75	.96
F06	Speaking	3.75	.50
F11	Knowing How to Learn	3.75	.50
F02	Writing	3.50	1.29
F14	Self-Esteem	3.50	1.00
F10	Seeing Things in the Mind's Eye	2.75	1.71
F07	Creative Thinking	2.25	.96

Job: Accounting/Financial Analyst

Allocates Time (C01)

Determine the order in which to conduct an audit so as to stay within the company's time and budget constraints for the audit. To perform this task, the accounting/financial analyst obtains the work program (which details the steps to be performed in auditing the balance) from his or her supervisor; reads the work program to obtain a general idea of the steps; decides which steps are the most important and should have priority; contacts clients to determine their schedules and availability; prioritizes steps based on client availability and step importance; lists steps in order of priority; conducts them in that order; and adjusts step order as necessary to stay within deadlines. Task ID#: 8011721

Respond to a Board of Education request for an immediate financial projection. To perform the task, the analyst receives the request and stops work on his or her other activities without jeopardizing overall office functioning. The operator makes calls to routine data sources and compiles projections based on current levels of expenditure. After reviewing the materials with a supervisor, the operator prepares a two-page summary of the data. Task ID#: 8011051

Allocates Money (C02)

Develop a budget for the upcoming fiscal year. To perform this task, the accounting/financial analyst reviews the actual expenditures of the current year on a spreadsheet; projects the current figures into the next year while adjusting for expected changes (e.g., new equipment, new customers); determines if the "bottom line" is within an acceptable range; adjusts details to manipulate the bottom line accordingly; distributes the budget to specific departments; and tracks variances between actual and budgeted amounts during the year. Task ID#: 8021841

Acquires and Evaluates Information (C05)

Conduct a financial audit of a government contractor to determine the contractor's compliance with government regulations. To perform this task, the accounting/financial analyst obtains a list of the client's contracts and financial information; conducts an analysis to determine which contracts will cover the largest percentage of the client's work; selects contracts to be reviewed; obtains selected contracts from the client; reads contracts to determine areas relevant to compliance; compares financial information with the contract; chooses areas of non-compliance based on reading and comparison; and writes a summary of conclusions. Task ID#: 80511721

Reconcile accounts before consolidation is completed each month. To perform this task, the accounting/financial analyst makes copies of books of division ledgers prior to closing the organization ledger; closes out anything outstanding in the division reconciliation;

checks division cash entries against the corporate ledger to ensure that the cash accounts agree; compares the organization spreadsheet with division accounts to ensure that the figures match; flags any large difference between corporate and division for immediate action; copies the ledger when it is closed and prepares/updates a spreadsheet for each division that is showing outstanding items; and faxes a copy of the spreadsheet to the divisions. Task ID#: 8011711

Interprets and Communicates Information (C07)

Develop ways for others to communicate data. To perform this task, the financial analyst determines the information to be communicated, selects the best mode of communication, develops a graphic representation of the information, removes technical jargon from any of the written narratives, and reduces the information to two pages in length. Task ID#: 8071051

Act as a liaison between the organization and division offices concerning discrepancies in financial bookings. To perform this task, the accounting/financial analyst reconciles accounts of the organization and division offices; obtains a copy of memos sent from the organization office to the division office and writes memos to division personnel explaining the organization account; contacts division personnel to obtain their explanations of the discrepancies; relays this information to the organization personnel; and performs liaison functions until the discrepancy is resolved. Task ID#: 7051711

Determine whether and why a financial deficit exists. To perform the task, the financial analyst retrieves expenditure, staffing level, and other relevant information from the database. The analyst then reviews the anticipated income and determines the level of deficit. Task ID#: 7081051

Uses Computers to Process Information (C08)

Prepare the monthly debt schedule. To perform this task, the accounting/financial analyst reviews financial statements from the division to see if anything is outstanding; enters debts in the appropriate place in the spreadsheet and obtains the organization's portion of the debt ledger; enters appropriate information from the previous year's debt schedule into the monthly schedule; prints the spreadsheet; verifies entries through hand recalculation; and makes changes in the spreadsheet if necessary. Task ID#: 8081711

Maintain fixed asset records using a mainframe computer program. To perform this task, the accounting/financial analyst enters data (price, location, department) regarding an asset purchase into a menu-driven database; runs a program module to calculate the monthly depreciation; runs a program module to allocate the depreciation amount to the appropriate department; checks totals of the fixed asset listings against those for the previous month; and runs programs to produce reports upon specific request (e.g., department inventory). Task ID#: 8081841

Participates as a Member of a Team (C09)

Discuss with the audit team the significant issues that need to be presented to management upon completion of the audit. To perform this task, the accounting/financial analyst communicates findings of his or her own portion of the audit with the audit supervisor; communicates findings with the entire team; listens to findings of the team; determines/discusses (as part of the team) the significant findings/issues; allocates to team members assignments to research certain significant issues; conducts assigned research; and writes a summary of findings to be incorporated into a memo to management. Task ID#: 8091721

Develop projections from large databases into an acceptable solution. To perform the task, the financial analyst obtains highly detailed data from the mainframe computer. These data are reduced to summary categories with the help of the analyst's colleagues. The team works with summary data to compute projections. The analyst reviews the projections and the approaches to analysis with colleagues. In the end, the projections are finalized. Task ID#: 8091051

Teaches Others (C10)

Teach a co-worker the procedure for sending bi-monthly memos. To perform this task, the accounting/financial analyst obtains a copy of the financial report from the corporate files and calls division personnel to discuss why a memo was needed; highlights division accounts and dollar figures to be included so the co-worker can easily find them; explains to the co-worker the reason for memo and what needed to be included (highlighted portions); copies journal vouchers for the co-worker; explains to the co-worker what voucher information was to be included in the next memo; proofreads the co-worker's memos; and explains any problems or necessary corrections to the co-worker. Task ID#: 8101711

Exercises Leadership (C12)

Review current accounting policies and procedures (i.e., the limit on petty cash expenditures). To perform this task, the accounting/financial analyst assesses the advantages and disadvantages of current practices (e.g., number of manual checks written below and above the current limit); analyzes the potential for security risks and for savings in time and money; determines the optimal solution (e.g., the dollar value at which most checks are written that is within a reasonable security risk); reviews proposed policy merits with affected departments (e.g., accounts payable and petty cash); and implements/documents new policy (e.g., notifies staff of policy and effective date). Task ID#: 8121841

Understands Systems (C15)

Act as a liaison between division and organization offices to obtaining approval for a new cost or charge account. To perform this task, the accounting/financial analyst explains to the requesting personnel who to contact at the organization office; writes a memo for authorization of the account; creates a new charge number for the account and logs in the new number; faxes a memo with the new charge number to division accounting personnel; and tells the requesting individual to contact these personnel. Task ID#: 8151711

Monitors and Corrects Performance (C16)

Test a client's payroll system to determine its efficiency and accuracy. To perform this task, the accounting/financial analyst reviews the previous year's work on the system (if applicable); discusses the system with the client (the personnel in charge of payroll); writes his or her own understanding of the client's system in textual form and with flow-chart software; conducts financial tests of time card preparation; conducts financial tests of time card input; conducts financial tests of output from the payroll system (e.g., deductions); determines problems and degrees of problems and writes suggestions for systems improvement; and discusses suggestions with supervisor and/or client. Task ID#: 8161721

Electronically convert information to a different system (e.g., to monitor accounts payable translation). To perform this task, the accounting/financial analyst runs a program to take raw data from the accounts payable (AP) system and convert it to a general ledger; compares the general ledger total with the AP system total; determines the origin of a variance (the general ledger or the AP system); reviews detailed transactions, paying attention to amounts, dates, and account numbers; assesses amount of discrepancies; deletes incorrect data from the general ledger; corrects the fiscal calendar with the AP system to include all days of the fiscal month; and resubmits data to the general ledger. Task ID#: 8161841

Perform analyses comparing current expenditures with projected needs and revenues. To perform this task, the accounting/financial analyst obtains expenditure, enrollment, and cost-of-living data; compares data with projections and calculates the resultant surplus or deficit; and communicates these results to the relevant person(s). Task ID#: 8161051

Selects Technology (C18)

Send a new charge account memorandum to division personnel using a fax machine or electronic system. To perform this task, the accounting/financial analyst determines how quickly personnel needs information; determines how many it needs; sends the memo electronically through the organization system or sends the memo by fax if the division office needs several copies. Task ID#: 8181711

Determine the need to upgrade programming. To perform the task, the financial analyst becomes aware of a new technology, determines its suitability for specific tasks and, if it is judged to be potentially useful, writes a justification for the purchase of the technology. Task ID#: 8181051

Reading (F01)

Read government contracts to determine and locate financial information and possible areas of exposure. To perform this task, the accounting/financial analyst reviews the contract quickly to gain a general understanding of the content; reads the contract in detailed manner, looking at each part carefully; highlights possible problem areas while reading the contract; compares highlighted areas from the contract to available financial data (client files, publications, books); makes conclusions as to the contractor's performance; and rereads highlighted areas from the contract to verify conclusions. Task ID#: 7011721

Arithmetic (F03)

Compare the current year's projections with actual expenditures to ensure consistency. To perform the task, the financial analyst obtains a printout of the current year's expenditure data from the accounting office and also obtains ancillary information relative to the account category being examined. The analyst uses this data to determine how much additional money is likely to be spent by the end of the fiscal year. Task ID#: 7031051

Prepare the personal property tax return of a building. To perform this task, the accounting/financial analyst compiles a listing of assets (i.e., office furniture and equipment); sorts the list of assets by year of acquisition; computes the total dollar values of the assets by year of acquisition; multiplies the total dollar value by the assessment percentage provided by the county for each acquisition year and by the applicable tax rate; and adds these figures across all of the acquisition years. Task ID#: 7031841

Problem Solving (F09)

Audit account balances of government contracting firms. To perform this task, the accounting/financial analyst tests financial statement balances that are incongruent; reviews financial statements more carefully and compares them with other areas of information; discusses problems with the client and/or requests additional information; reviews purchase orders to see if they match invoices; reviews client financial information put into the client's general ledger system; adjusts financial statements to resolve any discrepancies that were found; and documents the findings in work papers. Task ID#: 70911721

Reasoning (F12)

Prepare the journal entry for a cost being transferred by division accounts. To perform this task, the accounting/financial analyst reads chart of accounts (company file) and locates the type of account being transferred; reviews the transfer to determine if it is a credit or debit; and debits or credits the appropriate account in the journal. Task ID#: 7121711

Responsibility (F13)

Conduct an audit for a government contractor to determine exposure areas due to non-compliance with contractual terms. To perform this task, the accounting/financial analyst travels to the client site independently; discusses needed information with client (financial statements, work files, documentation); reads through the contract to ensure that it is in workable order; highlights relevant areas of the contract; reorders the contract if necessary; recalculates rates based on the contractor's financial data; compares contractor's data with contractual information to determine exposure areas; creates a spreadsheet to show exposure areas; and writes a summary of the audit and exposure areas. Task ID#: 7131721

Complete all organization schedules at the end of the year. To perform this task, the accounting/financial analyst completes financial schedules for his or her own office; approaches a supervisor and asks what else needs to be done; asks co-workers what needs to be done; asks co-workers and other departments for clarifications; and edits accounts by entering numbers in the spreadsheet. Task ID#: 7151711

Self-Management (F16)

Prepare a major forecast with limited information, such as only one notice from the supervisor, and that notice arriving only three months before the forecast due date. To perform the task, the financial analyst receives the initial assignment and directions and obtains the necessary information and due date. The analyst searches for elusive information from a variety of sources, develops necessary computations, reviews his or her own progress near the end of the work period, and prepares a final presentation of the forecast. Task ID#: 7161051

Integrity/Honesty (F17)

Follow rules and regulations and know the consequences for non-compliance when preparing data for the Federal Government (tax returns). To perform this task, the accounting/financial analyst familiarizes himself or herself with the applicable rules, regulations and laws, and ensures compliance them. Task ID#: 7171841

Law Enforcement Officer (Based on Five Interviews)

Law enforcement officers enforce traffic and criminal laws and municipal ordinances—traffic patrol, motorist assistance, response to civil disturbances, security, criminal investigation, apprehension and arrest. They serve as an officer of the court, prepare arrests and other reports, and provide written and oral testimony.

Competencies		Mean	Std. Dev.
C07	Interprets and Communicates Information	4.80	.45
C09	Participates as a Member of a Team	4.60	.55
C06	Organizes and Maintains Information	4.60	.55
C11	Serves Clients/Customers	4.60	.55
C14	Works with Cultural Diversity	4.40	.89
C12	Exercises Leadership	4.20	.84
C13	Negotiates to Arrive at a Decision	4.20	.84
C05	Acquires and Evaluates Information	4.20	1.30
C01	Allocates Time	4.20	.84
C15	Understands Systems	4.00	1.00
C10	Teaches Others	3.40	1.14
C08	Uses Computers to Process Information	2.80	1.30
C17	Improves and Designs Systems	2.80	1.10
C04	Allocates Human Resources	2.60	1.14
C16	Monitors and Corrects Performance	2.60	1.52
C19	Applies Technology to Task	2.60	1.52
C18	Selects Technology	2.20	1.30
C03	Allocates Material and Facility Resources	1.80	1.79
C20	Maintains and Troubleshoots Technology	1.40	.55
C02	Allocates Money	1.40	.55

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F08	Decision Making	5.00	.00
F05	Listening	5.00	.00
F02	Writing	5.00	.00
F17	Integrity/Honesty	5.00	.00
F06	Speaking	4.80	.45
F09	Problem Solving	4.80	.45
F13	Responsibility	4.80	.45
F12	Reasoning	4.60	.55
F14	Self-Esteem	4.60	.55
F15	Social	4.40	.89
F16	Self-Management	4.20	.84
F01	Reading	4.20	.84
F11	Knowing How to Learn	3.40	1.14
F0	Arithmetic	3.40	1.14
F07	Creative Thinking	3.20	1.30
F10	Seeing Things in the Mind's Eye	2.60	1.52
F04	Mathematics	2.40	1.34

Job: Law Enforcement Officer

Allocates Time (C01)

Handle the decisions and actions surrounding the arrest of a juvenile within the boundaries of the six-hour rule (a rule to encourage prompt processing of juvenile cases). To perform the task, the law enforcement officer places a juvenile under arrest. The officer prepares an incident report, transports the arrestee to the police station for a booking, completes the booking process, and completes the second part of the report. Next, the officer determines whether the arrestee is to be detained or released to a parent. All of this must be done promptly to meet the six-hour rule. If the arrestee is detained, the law enforcement officer brings in an intercept officer to take responsibility for transporting the juvenile to a juvenile detention center and advising the parents of the juvenile's location. Task ID#: 8011061

Respond to a call for service in a timely fashion. To perform the task, the law enforcement officer takes and acknowledges a service call and responds immediately, halting all current activities. Task ID#: 8011131

Prioritize time for assigned duties. To perform the task, the law enforcement officer identifies his or her duties, including analyzing the needs of the community. These needs are compared with the officer's personal preferences and obligations, and all duties are performed in a timely manner. Task ID#: 8011141

Acquires and Evaluates Information (C05)

Obtain the needed information for an incident report. To perform the task, the law enforcement officer communicates with the witness(es) of an incident to understand the situation clearly. The officer asks specific questions to make sure that all necessary details are obtained. The officer evaluates the importance of the obtained information and decides what information will be recorded in the report. Task ID#: 8051061

Write crime reports. To perform this task, the law enforcement officer determines whether or not a specific incident is a crime; assesses the seriousness of the crime; examines whether or not the crime can be solved; determines if there are any suspects; assesses the evidence (e.g., decides if the witness or victim is reliable); and writes the report, based on the seriousness of the crime and whether the crime can be solved. Task ID#: 8011941

Interprets and Communicates Information (C07)

Assist in the prevention of crime in a certain area of the community by informing the public. To perform this task, the law enforcement officer maintains high visibility in the community (by car and foot); distributes information about the crime and how it is happening; and encourages the public to call the police with relevant information. Task ID#: 8071941

Gather and use information to write a homicide report. To perform the task, the law enforcement officer receives and acknowledges a call from the dispatcher. The officer responds to the call and, upon arrival, takes control and secures the crime scene. The officer analyzes the situation to identify danger, potential witnesses and evidence; calls the evidence team; and interviews personnel who are on the scene at the time. Finally, the officer uses this information to write a report of the situation. Task ID#: 8071131

Serves Clients/Customers (C11)

Handle complaints from the public. To perform this task, the law enforcement officer listens to the citizen's complaint; shows empathy and concern for the citizen; assures the citizen that the complaint will be investigated; and investigates the complaint if it is serious enough. Task ID#: 8111941

Respond to a service call. To perform the task, the law enforcement officer receives and acknowledges a call, analyzes, the situation and takes control of it, showing sensitivity to any victim's rights and needs. The officer performs this task while adhering to the department's policies and procedures. Task ID#: 8111131

Exercises Leadership (C12)

Call the chief's attention to a departmental policy that is judged to be unfair or inadequate. To perform this task, the law enforcement officer identifies a problem area in an existing policy. After discussing the situation with the sergeant and soliciting assistance or an opinion, the officer brings the issue to the attention of the chief, either orally or with a written memo to convey suggested improvements. If no response is received from the chief, the officer takes the issue to the union for action. Task ID#: 8171061

Works with Cultural Diversity (C14)

Resolve conflicts which arise between individuals of different cultures. To perform the task, the law enforcement officer determines the nature and underlying reasons behind the conflict. Gathering facts and the perspectives of each participant, the officer uses this information to search for a basis for compromise, and takes care not to take sides or to ask one party to compromise more than the other. The officer takes steps to diffuse the aspects of the conflict situation that relate to cultural or gender differences and to diffuse any accusations that the officer is culturally biased in handling confrontations across groups (including members of his or her own ethnic group). Task ID#: 8141061

Interact with the citizens of a low income, minority populated community. To perform the task, the law enforcement officer needs to be aware of citizens' problems and of tensions which exist between the police and the community. The officer must also be sensitive to the needs of citizens and be aware of ways to solve any problems which might arise. Task ID#: 8141141

Understands Systems (C15)

Understand the various aspects of the criminal justice system. To perform the task, the law enforcement officer determines which court is appropriate to handle a given case and follows the case through the courts to its conclusion. Task ID#: 8151181

Monitors and Corrects Performance (C16)

Conduct a crime analysis to gain more information about crimes. To perform this task, the law enforcement officer determines where crimes are being committed, what crimes are being committed, and what tools are being used to commit the crimes; develops a graph illustrating information on the crimes; stakes out the area where the crimes are being committed; and stops and arrests the criminal. Task ID#: 8161941

Applies Technology to Task (C19)

Use computers in cars to gain information. To perform this task, the law enforcement officer puts data into the computer using an appropriate format; receives information from the computer; and interprets the computer output. Task ID#: 8191941

Writing (F02)

Prepare written reports of incidents and crimes to put into computers. To perform the task, the law enforcement officer receives information from a witness, summarizes and synthesizes the information, and writes it down in chronological order. The officer proofreads the report alone or with others. After corrections are made, the officer turns in the report. Task ID#: 7021061

Write daily incident reports. To perform the task, the law enforcement officer gathers and verifies information. This information is written in to the predefined spaces on a standardized report form. Further, the officer writes out a narrative statement to describe a particular incident. Task ID#: 7021181

Listening (F05)

Listen to a complaint from a dispute between neighbors. To perform the task, the law enforcement officer receives and responds to a call. Upon arriving at the scene, the officer approaches and listens to the complaints of the involved parties one at a time.

The officer researches the facts behind the dispute and mediates the dispute based upon these facts. Task ID#: 7051141

Decision Making (F08)

Decide whether to give a motorist a ticket. To perform this task, the law enforcement officer parks his or her car in a safe manner; approaches the vehicle and obtains the driver's license and registration; asks whether the driver realizes what he or she did; decides whether to write a ticket; completes paperwork in the car; calls in information if the driver looks suspicious; and, if the driver is wanted, finds out for what crime; compares the driver with a physical description of the wanted individual; and arrests the driver if there is a match. Task ID#: 7081941

Decide whether an incident is actually a crime. To perform the task, the law enforcement officer obtains an incident report. The officer reviews all of the available information and evidence and refers to the relevant penal code or other institutional code to see whether the incident meets the criteria for classification as a crime. A decision as to how to label the incident is made on the basis of the above actions. Task ID#: 7081061

Apprehend the suspect from a shooting incident. To perform the task, the law enforcement officer locates the shooting suspect. The officer analyzes the terrain, locality and environment to facilitate decisions about actions to be taken. The officer stays out of sight for protection, protects others, and stabilizes the situation. Finally, the officer contacts the supervisor and emergency services to deal with the injuries resulting from the shooting incident. Task ID#: 7081131

Enforce the traffic laws. To perform the task, the law enforcement officer receives a complaint from a citizen that drivers are not stopping at a particular stop sign but go straight through the intersection. The officer positions himself or herself near the stop sign, observes motorists, and determines violators. The officer decides whether to stop the violators and which of them, if any, to ticket. Task ID#: 7081141

Effect a criminal arrest. To perform the task, the law enforcement officer determines what police action, if any, is necessary in a given situation. The officer gathers information, such as from interviews and physical evidence at the crime scene. When the officer deems it appropriate, he or she makes an arrest or refers the crime to another agency for handling. Task ID#: 7081181

Responsibility (F13)

Patrol an assigned area alone. To perform the task, the law enforcement officer receives an assignment to patrol a given area. The officer performs the patrol, gathers any appropriate information, and reports activities to the supervisor. Task ID#: 7131141

Integrity/Honesty (F17)

Honestly handle personal property found on school grounds. To perform the task, the law enforcement officer patrols the school grounds and finds personal property of value which does not have any obvious ownership markings. The officer tries to find less obvious identifying marks and, if any are found, contacts the owner about the lost property. If no markings are found, the officer turns the property over to school administrators. However, if the item is highly valuable, the officer turns it in to the sergeant rather than to school administrators. Task ID#: 7171061

Secure, protect, and report physical evidence. To perform the task, the law enforcement officer establishes a perimeter around the crime scene to secure the evidence. Next, the officer documents all of the details about the incident and the evidence, including who, what, when, where, how many, and why. Finally, the officer turns in all of the evidence (e.g., money, drugs, firearms) discovered and does not keep any items for personal use. Task ID#: 7171131

Appear in traffic court. To perform the task, the law enforcement officer issues a ticket for a traffic violation. The officer testifies in court and obtains a ruling based upon his or her honest testimony. Task ID#: 7171181

Quality Control Inspector (Based on Four Interviews)

Quality control inspectors inspect building, equipment, or products for conformance to governmental rules and regulations. They may take representative samples of or conduct on-site inspections of various regulated products such as meat, produce, milk, cheese and grain, or of buildings and equipment such as elevators or heating/air-conditioning equipment. Inspectors obtain evidence and prepare reports regarding conformance with governmental standards and rules. They keep inspection records and may review and issue requests for permits.

Competencies		Mean	Std. Dev.
C07	Interprets and Communicates Information	4.50	.58
C14	Works with Cultural Diversity	4.00	.82
C06	Organizes and Maintains Information	4.00	.82
C12	Exercises Leadership	3.75	1.26
C05	Acquires and Evaluates Information	3.75	1.26
C01	Allocates Time	3.75	.50
C11	Serves Clients/Customers	3.75	.96
C16	Monitors and Corrects Performance	3.50	1.00
C19	Applies Technology to Task	3.50	1.29
C09	Participates as a Member of a Team	3.50	.58
C20	Maintains and Troubleshoots Technology	3.25	.96
C17	Improves and Designs Systems	3.25	1.26
C15	Understands Systems	3.00	.82
C13	Negotiates to Arrive at a Decision	3.00	1.41
C18	Selects Technology	3.00	.82
C10	Teaches Others	2.50	1.29
C04	Allocates Human Resources	2.50	1.73
C03	Allocates Material and Facility Resources	2.25	.50
C08	Uses Computers to Process Information	1.50	1.00
C02	Allocates Money	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F01	Reading	5.00	.00
F17	Integrity/Honesty	5.00	.00
F02	Writing	4.75	.50
F13	Responsibility	4.25	.50
F10	Seeing Things in the Mind's Eye	4.00	.82
F06	Speaking	4.00	.00
F12	Reasoning	4.00	.82
F09	Problem Solving	4.00	.82
F05	Listening	4.00	.82
F16	Self-Management	3.75	.50
F11	Knowing How to Learn	3.75	.50
F14	Self-Esteem	3.75	.96
F15	Social	3.50	.58
F08	Decision Making	3.00	.82
F04	Mathematics	2.75	.96
F03	Arithmetic	2.75	.50
F07	Creative Thinking	2.25	.96

Job: Quality Control Inspector

Allocates Time (C01)

Schedule site inspections. To perform this task, the quality control inspector receives an assigned number of inspections for a given time period; coordinates case file writing and inspections to complete his or her work in a given time period without getting overloaded; when scheduling work, takes into account the six-month completion criterion for issuing citations, and deals with contingencies (such as the fact that complaint inspections must be completed within three days of the complaint and follow-up inspections within days) by stopping work on standard cases and working on priority cases. Task ID#: 8011801

Establish a system for inspecting elevators within a given area and time frame while dealing with other contingencies. To perform this task, the quality control inspector organizes required inspections based on their due dates and establishes a geographical route which facilitates completion. Task ID#: 8011811

Allocate enough time to complete reports by a given deadline, since citations become invalid if they are not formally reported. To perform the task, the quality control inspector decides how much time to spend on each report to complete all reports efficiently and in a timely manner (e.g., he or she knows that a routine report takes less time than an accident report); and allocates sufficient time to the investigation, writeup, and completion phases of each report. Task ID#: 8011621

Acquires and Evaluates Information (C05)

Find out the strength information about a given metal (e.g., ferrous iron). To perform the task, the quality control inspector recognizes a need to obtain information on metal strength during his or her inspections; knows which books and safety code manuals will supply the needed information; and searches in the appropriate places for the needed information. Task ID#: 8151591

Make citation decisions on the basis of the proper information. To perform the task, the quality control inspector is familiar with the safety standards to be adhered to by employers; distinguishes between applicable safety standards and general work practices; and cites safety standards which are in violation even if the violation is a result of a "general work practice." Task ID#: 8161621

Analyze the information contained on a chemical material safety data sheet. To perform this task, the quality control inspector understands chemical configurations, such as which chemicals are hazardous and which are not; understands protective clothing appropriate for particular chemical processes; reads the material safety data sheet; analyzes the data sheet for correctness; and takes the data sheet in the work place to see whether its products/materials meet specified standards. Task ID#: 7011801

Organizes and Maintains Information (C06)

Complete case file information. To perform this task, the quality control inspector gathers and completes all required documents; extrapolates information from field notes and puts it into the appropriate places on the forms; relates the obtained information to the photographs which were taken; completes the case file; and organizes the case file information for effective use in legal obligations, information maintenance, and presentations to officials. Task ID#: 8061801

Organize the information found in manufacturers' product data reports into specified areas (types of material, strength of materials) and devise a format for gathering such information. To perform the task, the quality control inspector receives a variety of information from manufacturers' data reports; reads the reports to abstract pertinent information; and organizes that information into selected formats. Task ID#: 8061591

Interprets and Communicates Information (C07)

Communicate results of an inspection to the owner. To perform this task, the quality control inspector performs an inspection; uses the code to show the owner the nature of the apparent violation; explains the various facets of the code and of the violation to the owner; and answers any questions which arise. Task ID#: 8071811

Interpret inspection-related evidence and write it up in a way that is understandable to others. To perform the task, the quality control inspector documents evidence of violations at an inspection scene by taking photographs and measurements, and writes up the details of the inspection in such a way that others can understand the process. Task ID#: 8071621

Deal with a layperson's lack of understanding of a particular code or rule by offering interpretations. To perform this task, the quality control inspector recognizes a problem with a piece of equipment; reads the relevant code to the owner and receives feedback indicating disagreement with the code's meaning; turns to the interpretation section of the manual to clarify ambiguous parts of the code; and offers suggested ways to solve the problem and stay within the code requirements. Task ID#: 7091811

Teaches Others (C10)

Train new employees concerning hazard recognition, and decide when to issue both serious and non-serious citations. To perform the task, the quality control inspector instructs new employees to read appropriate manuals; interprets their standards to the new employees; takes new employees to an inspection site so that they can watch the senior workers perform an inspection; verbalizes inspection activities as they are completed, including details on report writing and performing effectively; decides when the trainees are ready for independent field work; and monitors the new hirees' activities, providing them with evaluations of their performance. Task ID#: 8101621

Serves Clients/Customers (C11)

Clearly convey information about specific hazards and hazard abatement techniques to employers and their employees. To perform this task, the quality control inspector collects information about hazards (machine or process-related) and identifies particular ones; looks at the machine/process in question; understands what type of guard is required to protect the worker from potential hazard; knows how machines/processes can be engineered for greater protection to employees working with them; describes this knowledge to the employer and employees; and clearly communicates employer rights and obligations under the law. Task ID#: 8111801

Works with Cultural Diversity (C14)

Communicate with different ethnic/language groups where there is a barrier to understanding. Performing this task may require the quality control inspector to recognize that it is not possible to make a potential violation understood over the telephone and that he or she may have to meet the perpetrator in person. During this inspection, the inspector understands that differences in lifestyle may affect an individual's understanding of the safety regulations and thus also affect his or her actions. For instance, many immigrant owners have worked with dangerous materials before entering the United States and do not understand either the problem with doing this or the need for regulations. Task ID#: 8141591

Monitors and Corrects Performance (C16)

Make citation decisions on the basis of the proper information. To perform this task, the quality control inspector is familiar with the safety standards to be adhered to by employers; distinguishes between applicable safety standards and general work practices; and cites safety standards which are in violation even if the violation is a result of a "general work practice." Task ID#: 8161621

Improves and Designs Systems (C17)

Compare the employer's present training program with standards or requirements. To perform this task, the quality control inspector reviews the safety and health aspects of the inspected organization's training policies; determines whether these policies are meeting legal requirements; and, if they are not, suggests ways to improve compliance. Task ID#: 8171801

Selects Technology (C18)

Choose the proper tools for a task involving checking for electrical problems. To perform the task, the quality control inspector determines the nature of the problem (i.e., electrical), chooses the appropriate tools for the task, and uses the tools to explore the problem. Task ID#: 8181621

Applies Technology to Task (C19)

Identify the various technologies interacting in a machine or process in order to determine whether the technology (in this case a foot pedal on a power press) is in compliance with relevant safety codes or regulations, and to see what technology is applicable to bring things into compliance. To perform this task, the quality control inspector understands how the different systems (mechanical, electrical, hydraulic) of a machine work and how they interact to cause a machine to work; explores whether the system meets regulations (in this case, decides whether the foot pedal requires a guard to avoid inadvertent activation of the machine); and, if the system is in violation, applies relevant technology (e.g., a foot pedal guard) to deal with the violation. Task ID#: 8191801

Maintains and Troubleshoots Technology (C20)

Identify a safety problem with an elevator and ascertain how critical the problem is to continued operation of the equipment. To perform this task, the quality control inspector assesses an elevator and notices a defect in a portion of the equipment (e.g., the top car control device, which enables one to control the elevator); determines whether the problem, if not corrected, is critical to safe operation; and, safe operation is jeopardized, generate possible solutions to the problem, thus allowing the equipment to continue operating. Task ID#: 8201811

Understand how to maintain a boiler or pressure vessel. To perform the task, the quality control inspector understands the preventive maintenance needed on a boiler or pressure vessel, and can thus help ensure that repair and maintenance persons are qualified to work on this equipment. The inspector is aware that ineffective maintenance can create problems of safety and cost effectiveness. Task ID#: 8201591

Reading (F01)

Locate a code requirement within a safety code text. To perform this task, the quality control inspector decides what code applies to the particular job, based upon the equipment's requirements (for instance, different codes apply to elevators made in different years); goes to the index of the codebook for the proper subject matter and the page number(s) of the appropriate code rule; turns to the pages and identifies the applicable rule number; reads the appropriate section of the code, interpreting the meaning and relevance of the text; uses the dictionary to understand ambiguous terms; and looks up any additional codes referred to in the initial code text or index. Task ID#: 7011811

Writing (F02)

Write reports of investigation results. To perform this task, the quality control inspector gathers employee interview statements about an accident or situation being investigated and conducts a physical investigation, including measurements and other means to see if safety laws have been violated. The inspector writes a report of what was done during the inspection, the persons with whom the inspector spoke, what the determination was, whether standards were violated, and any alleged safety violations. The inspector sends the report off for typesetting, reviews the typeset document, gives it to the supervisor for comments, incorporates supervisor comments, and considers suggestions. Task ID#: 7021621

Decision Making (F08)

Make a visual inspection of equipment and decide whether it meets safety code requirements. To perform the task, the quality control inspector visually inspects the boiler or pressure vessel; collects pertinent information to decide whether the equipment meets the code; determines whether or not a violation has occurred; and refers to the codebook to verify the decision. Task ID#: 7081591

Foresee potential conflicts and notify appropriate individual(s). To perform this task, the quality control inspector gets the message that a building owner does not want to take the inspector's word concerning the interpretation of a given code. The inspector then informs his or her supervisor or chief inspector of the situation and indicates that the owner might approach them for a code ruling. Task ID#: 8161811

Seeing Things in the Mind's Eye (F10)

Read building blueprints to identify fire protection systems. To perform this task, the quality control inspector obtains and examines a blueprint showing the specific locations of fire protection equipment, using the symbols found in the blueprint's key. Task ID#: 7101801

Read and interpret the blueprints of a boiler in order to oversee its assembly. To perform the task, the quality control inspector knows what the symbols on the blueprint mean and correctly interprets the symbols when using the blueprint. Task ID#: 7011591

Responsibility (F13)

Assimilate new formal learning in a limited time period and learn new standards and technologies. To perform the task, the quality control inspector attends formal training (both lecture and visual) to become familiar with new technologies in the work place; reads to keep abreast of new technologies; and incorporates his or her new knowledge into the work situation. Task ID#: 7111621

Perform the job thoroughly and independently. To perform the task, the quality control inspector realizes that no one will be constantly available to supervise, and takes it upon himself or herself to perform a job without constant monitoring. The inspector acts responsibly by doing the necessary research to perform the job honestly and completely. Task ID#: 7131621

Self-Esteem (F14)

Believe that one is capable of making correct decisions (such as in determining a code citation). To perform the task, the quality control inspector realizes that he or she has enough knowledge to make a proper decision and enough confidence to adequately demonstrate that knowledge. Task ID#: 7141591

Social (F15)

Blend in with and respond to building owners, lawyers, architects, and contractors, in a way that is understood by them to help complete a job. To perform this task, the quality control inspector speaks to these audiences in a way that enables him or her to relay information to them professionally and clearly. Task ID#: 7151811

Integrity/Honesty (F17)

Collect accurate information and communicate it honestly to the judge during a hearing. To perform this task, the quality control inspector does not cover up inadequacies in how a case file inspection was conducted; admits uncertainty if asked a question to which he or she does not know the answer; was physically present at the inspection site when he or she says she was; and does not accept monetary bribes to change inspection conclusions. Task ID#: 7171801

Accommodations and Personal Services

Waiter/Waitress (Based on Four Interviews)

Waiters and waitresses deal with customers. Waiters/waitresses take customers' orders, serve food and beverages, prepare itemized checks, and sometimes accept payments—but the manner in which these tasks are performed varies considerably, depending on the type of establishment.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C08	Uses Computers to Process Information	4.75	.50
C09	Participates as a Member of a Team	4.50	.58
C14	Works with Cultural Diversity	4.25	.96
C15	Understands Systems	4.00	1.41
C01	Allocates Time	3.75	.96
C10	Teaches Others	3.75	.96
C06	Organizes and Maintains Information	3.50	1.00
C07	Interprets and Communicates Information	3.25	1.50
C03	Allocates Material and Facility Resources	3.00	.82
C16	Monitors and Corrects Performance	3.00	.82
C05	Acquires and Evaluates Information	2.75	.50
C13	Negotiates to Arrive at a Decision	2.75	1.26
C04	Allocates Human Resources	2.50	1.29
C19	Applies Technology to Task	2.50	1.29
C1	Improves and Designs Systems	2.50	.58
C12	Exercises Leadership	2.25	1.26
C02	Allocates Money	1.75	.50
C18	Selects Technology	1.75	.96
C20	Maintains and Troubleshoots Technology	1.50	.58

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F15	Social	4.75	.50
F13	Responsibility	4.75	.50
F17	Integrity/Honesty	4.75	.50
F05	Listening	4.50	.58
F08	Decision Making	4.50	.58
F06	Speaking	4.50	1.00
F16	Self-Management	4.00	1.15
F14	Self-Esteem	4.00	1.15
F03	Arithmetic	3.75	.50
F01	Reading	3.75	.96
F11	Knowing How to Learn	3.75	.50
F12	Reasoning	3.50	1.00
F07	Creative Thinking	3.25	.50
F09	Problem Solving	3.00	.82
F10	Seeing Things in the Mind's Eye	3.00	.82
F04	Mathematics	2.50	1.29
F02	Writing	2.25	.50

Job: Waiter/Waitress

Allocates Time (C01)

Serve a customer based on his or her time constraints. To perform this task, the waiter/waitress greets the customer and evaluates the customer's time limitations; allocates time to properly place an order; checks on progress of the order to ensure that the allocated time frame is adhered to; and distributes the order within the estimated time. Task ID#: 8012011

Complete side work (on-going general tasks such as filling water pitchers) while waiting on a four-table station. To perform this task, the waiter/waitress realizes the side work needs to be checked on and completed; services all tables to allow for time to do side work; completes the side work quickly and efficiently; and returns promptly to service station tables. Task ID#: 8012091

Set up the restaurant for business 90 minutes before opening. To perform this task, the waiter/waitress assigns front-of-the-house (tables to be set) and back-of-the-house (kitchen area) duties; takes down all chairs; wipes off all tables (20 minutes); sets up tables with placemats, napkins, silver and condiments (30 minutes); helps others set up the back-of-the-house area; changes into his or her uniform; and obtains the checks and pens needed to begin shift. Task ID#: 8012101

Allocates Material and Facility Resources (C03)

Prepare oneself and one's station for the shift. To perform this task, the waiter/waitress makes sure that his or her uniform meets the restaurant's standards; ensures that materials for the shift are on hand; identifies and sets up his or her station; completes side jobs (e.g., brews coffee, fills water pitchers); and memorizes specials for the day. Task ID#: 8031981

Interprets and Communicates Information (C07)

Take a customer's request for a food order. To perform this task, the waiter/waitress greets the customer and explains what type of food is offered; answers any questions and makes suggestions; interprets the customer's needs; and communicates the order to the kitchen staff for preparation. Task ID#: 8072011

Uses Computers to Process Information (C08)

Use the computer to process a food order. To perform this task, the waiter/waitress receives an order from the customers and proceeds to the computer; enters into the computer the code number, the number of the table, and the number of people; enters the order into the computer (each dish has its own key on the computer); and pushes SEND to process the order to the kitchen. Task ID#: 8081981

Participates as a Member of a Team (C09)

Coordinate with other staff in providing service to customers. To perform this task, the waiter/waitress signals to the hostess that a table is available. After the hostess seats customers at the table, the waiter/waitress approaches the table and takes the customers' orders; places orders with the kitchen staff; after food is served and eaten, notifies busboy to ensure that dishes are cleared and coffee and water glasses are full; asks supervisor to approach table if there are any problems; delivers check; asks customers to proceed to the cashier; and notifies busboy that a table needs to be reset. Task ID#: 8092011

Serves Clients/Customers (C11)

Satisfy the needs of an unhappy customer. To perform this task, the waiter/waitress tries to determine what the problem is when told by the customer that he or she is unhappy with the meal; acts sympathetically and removes the cause of the problem; negotiates with the customer to resolve the problem; informs the shift manager about the problem and/or the resolution; and returns to the table and ensures that the customer's needs have been satisfied. Task ID#: 8111981

Provide exceptional service to guests through proper order taking procedures. To perform this task, the waiter/waitress greets guests within 30 seconds after they seated; suggests drinks and takes the drink order; repeats an order back to a guest to avoid any misunderstandings; promptly enters the order into the computer; ensures that all food and drinks are prepared and delivered in the allotted time period; checks back with the table to ensure the customers' satisfaction; and presents the check at the end of the meal. Task ID#: 8112091

Works with Cultural Diversity (C14)

Work with guests and co-workers of different backgrounds to facilitate the successful operation of the restaurant. To perform this task, the waiter/waitress greets guests and seats them; "reads" the guests by figuring out their needs and limitations based on their actions and appearance; explains a wide variety of menu items to the guests; and communicates with kitchen staff, waitstaff, and bartenders to satisfy guests' needs. Task ID#: 8142101

Understands Systems (C15)

Work within the guidelines of the system to satisfy the employer and the customer. To perform this task, the waiter/waitress coordinates with the bartender to get drinks after the customers are seated and order drinks; takes orders from customers for entrees; enters orders into the computer; coordinates with the kitchen staff to serve the entrees to the customers; and coordinates with the hostess in case of personal telephone calls for customers. Task ID#: 8151981

Understand and use the Option To Leave Early (OTLE) system. To perform this task, the waiter/waitress understands that the OTLE system goes into effect near the end of the evening; realizes that the number of tables being serviced will increase because other waiters are being told to leave early; understands that the decrease in waitstaff means less labor costs to the company; and accepts the added responsibility of servicing more tables. Task ID#: 8152091

Improves and Designs Systems (C17)

Suggest an improvement based on feedback from customers. To perform this task, the waiter/waitress receives negative comments on a certain item many times; brings these comments to the chef's attention; offers suggestions for improvement; and persists in making sure that the suggestion is carried through. Task ID#: 8172011

Applies Technology to Task (C19)

Run a computer financial at the end of a shift. To perform this task, the waiter/waitress uses the computer to close out all opened checks; enters the appropriate transaction code numbers to receive the server financial slip; matches the server financial slip with closed checks, charge slips, and cash; and ensures that all monies balance out in accordance with the server financial. Task ID#: 8192091

Reading (F01)

Read and understand items on the menu. To perform this task, the waiter/waitress breaks down menu items into categories; understands how the items are cooked and prepared; memorizes the preparation times for the items; and understands the sequence used to serve the items. Task ID#: 7012101

Speaking (F06)

Greet a table and establish an understanding with the customer. To perform this task, the waiter/waitress greets the table and introduces himself or herself; explains what is being offered (e.g., specials, buffet, options); asks customers if they are ready to order; if not, allows for more time; suggests items or options; and takes orders when customers are ready. Task ID#: 7062011

Decision Making (F08)

Generate alternatives for an order which is unavailable. To perform this task, the waiter/waitress finds out that an item ordered by a customer is unavailable; decides on possible alternatives to recommend to the customer; approaches the customer with the recommendation; and informs the kitchen about the new order. Task ID#: 7082011

Decide on which table to serve first if customers are seated at two tables at the same time. To perform this task, the waiter/waitress realizes customers are being seated at two tables at the same time; observes and evaluates which guests need service more promptly; tells the guests at the other table that they will be served very shortly; and services the table chosen for initial service. Task ID#: 7082091

Responsibility (F13)

Ensure that the work schedule is followed. To perform this task, the waiter/waitress determines his or her appropriate shift for the week; coordinates with the shift supervisor to keep him or her informed of any changes; finds suitable replacement if unable to come to work; and arrives to work well-groomed, prepared, and on time for scheduled shifts. Task ID#: 7131981

Perform the job responsibly. To perform this task, the waiter/waitress shows up on time and is prepared when scheduled; checks station for details that need to be completed before customers arrive; checks with other staff to see if anything needs to be done; checks for changes in the menu and the specials; communicates any changes to other servers; professionally serves customers based on their needs; and ensures that the restaurant is clean and properly prepared for the next shift. Task ID#: 7132011

Wait on tables so as to ensure customer satisfaction. To perform this task, the waiter/waitress arrives at work on time and is prepared when scheduled; checks station for details that need to be completed before customers arrive; checks with other staff to see if anything needs to be done; checks for changes in the menu and the specials; communicates any changes to other servers; professionally serves customers based on their needs; and ensures that the restaurant is clean and properly prepared for the next shift. Task ID#: 71322011.

Social (F15)

Greet and establish rapport with the customers. To perform this task, the waiter/waitress welcomes the customers to the table with a glass of water and a nice smile; issues an appropriate and friendly greeting based on his or her impression of the customers; and establishes a positive relationship with the customers. Task ID#: 7151981

Self-Management (F16)

Create an atmosphere in which to effectively perform the job. To perform this task, the waiter/waitress presents himself or herself well-groomed and with proper hygiene; checks the surroundings (tables, work area) to see if they are presentable; checks to see if co-workers are together as a unit; organizes self and surroundings with proper tools to fulfill required tasks; prepares self mentally to handle customers; and presents and maintains professional composure throughout the day. Task ID#: 7162011

Integrity/Honesty (F17)

Honestly account for dessert items that were purchased. To perform this task, the waiter/waitress takes a dessert order from a guest; personally retrieves the dessert from the dessert walk-in; brings the dessert out to the guest; proceeds to the computer and rings up the dessert item; and presents a check which includes the dessert item to the guest. Task ID#: 7172091

Check out at the end of a shift. To perform this task, the waiter/waitress obtains the computer readout/checkout slip; organizes the checkout according to cash, charges, complimentary items, and voids; matches the checkout report with cash, charges, complimentary items, and voids; and cashes out according to the checkout report. Task ID#: 7172101

Food Service Manager (Based on Four Interviews)

The food service manager is responsible for profitability, efficiency, quality, and courtesy in all phases of a food service operation. In large organizations, the manager may direct supervisory personnel at the next lower level. In most restaurants and institutional food service facilities, the manager is assisted by one or more assistant managers, depending on the size and business hours of the establishment. In large establishments, as well as many others that offer fine dining, the management team consists of a general manager, and one or more assistant managers, each of whom supervises a shift of workers. In smaller operations, the food service manager may supervise the kitchen and dining room staff directly. The manager must have a thorough knowledge of the responsibilities of all restaurant staff.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C01	Allocates Time	4.75	.50
C02	Allocates Money	4.75	.50
C12	Exercises Leadership	4.50	.58
C04	Allocates Human Resources	4.50	.58
C13	Negotiates to Arrive at a Decision	4.50	1.00
C09	Participates as a Member of a Team	4.25	.50
C10	Teaches Others	4.25	.50
C14	Works with Cultural Diversity	4.25	.96
C16	Monitors and Corrects Performance	4.00	1.41
C07	Interprets and Communicates Information	4.00	.00
C15	Understands Systems	3.75	.96
C17	Improves and Designs Systems	3.75	1.26
C05	Acquires and Evaluates Information	3.50	1.29
C06	Organizes and Maintains Information	3.25	1.50
C03	Allocates Material and Facility Resources	3.25	.96
C08	Uses Computers to Process Information	2.75	.50
C19	Applies Technology to Task	2.50	1.29
C18	Selects Technology	2.50	1.29
C20	Maintains and Troubleshoots Technology	2.25	1.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F05	Listening	5.00	.00
F08	Decision Making	5.00	.00
F02	Writing	4.75	.50
F09	Problem Solving	4.50	.58
F03	Arithmetic	4.50	1.00
F06	Speaking	4.25	.96
F17	Integrity/Honesty	4.25	.96
F15	Social	4.25	.50
F01	Reading	4.25	.96
F16	Self-Management	4.00	.82
F07	Creative Thinking	4.00	1.15
F12	Reasoning	4.00	1.15
F14	Self-Esteem	3.75	.50
F11	Knowing How to Learn	3.25	1.71
F04	Mathematics	2.75	.50
F10	Seeing Things in the Mind's Eye	2.75	1.26

Job: Food Service Manager

Allocates Money (C02)

Plan the forecast for the following fiscal year, for example in a college setting. To perform the task, the food service manager uses preliminary enrollment figures to forecast the number of students who will be enrolled in the college for the forthcoming year. Next, the manager decides what type of labor is necessary to service the forecasted number of students, how much money is available for food, and what kind of food can be purchased with the money. The manager also determines what percent of the budget will be allocated for direct costs, such as paper products, cleaning supplies, linens, and telephone bills. All of these decisions must be made in a way that ensures that the yearly profit margin will be met. Finally, the manager speaks with organization representatives to gain acceptance of the yearly forecast. Task ID#: 8021231

Prepare budgets, including cost and revenue forecasts, and track budget performance. To perform this task, the food service manager prepares budget projections based on the previous year's performance; tracks expenses of individual functions and tracks accumulated yearly expenses; tracks salary expenses in order to project needs for the coming year; regularly reviews billing procedures with the office staff to make sure that bills are paid in a timely manner and payments are deposited; and reviews food orders and excess food sales to determine if food purchasing is being done in amounts reasonably close to individual function usage. Task ID#: 8012071

Allocates Human Resources (C04)

Verify the cafeteria's staffing needs and assign duties to various staff based upon daily requirements. To perform the task, the food service manager assigns staff to various duties on the basis of menus, cafeteria volume, and catering schedules. He or she also assigns cleaning duties to cafeteria staff on a rotating schedule. Task ID#: 8042151

Acquires and Evaluates Information (C05)

Act upon the message from a cook that there is not enough food for the planned menu. To perform the task, the food service manager first receives notice from the cook that their are not enough food supplies to put out the full menu. The manager acts upon this message by examining the inventory of the food in stock and suggesting menu substitutions. Finally, the manager answers any questions that remain. Task ID#: 7051231

Organizes and Maintains Information (C06)

Prepare food production sheets (menu sheets) for the kitchen. To perform the task, the food service manager creates menus to inform the cooks what to prepare, predicts the number of students for each meal, determines acceptability factors for the products to be served, and ensures that the cook follows the menu specifications. After the meals, the food service manager follows up on whether the cooks prepared the required items and determines the amount of food remaining and the number of individuals who were served. The manager computes meal costs based upon a consideration of the amount of food remaining and the number of individuals who were served. Finally, the record of meal costs is filed and maintained for future audit. Task ID#: 8061231

Maintain employees' records as well as daily cash receipts. To perform the task, the food service manager keeps records of employees' attendance and performance, and updates and evaluates these data periodically. He or she also maintains a record of daily cash receipts, a record of vendors' invoices and food prices, a stock list of food and beverage items, and an updated record of important telephone numbers, such as vendors' and employees' telephone numbers. Task ID#: 8062151

Interprets and Communicates Information (C07)

Analyze orders for a function to determine if each assignment is correct and follow-up to make sure that all orders were received by department personnel. To perform this task, the food service manager reviews orders for a particular function to determine if the information is correct; checks with each department to see if it has received its order; meets with subordinate supervisors each week to communicate orders and to check for progress on past assignments; reviews details of a planned function with the client several times before the function deadline to make sure that the client's needs have not changed and the work plan is still the same; and checks with each supervisor to determine if the order was interpreted correctly. Task ID#: 8072071

Serves Clients/Customers (C11)

Communicate with clients to determine if they were satisfied with the service that they received. To perform this task, the food service manager politely and confidently receives an order from a client; asks questions to make sure of the details of the function; follows up with the client to verify the order and to substantiate that the order-taker interpreted it correctly; and monitors most functions to see if the customer's needs are being met and to help obtain necessary materials that may be in short supply or left off the order. The food service manager also quickly handles customer complaints or conflicts; obtains any last minute resources necessary to maintain good customer relations; and receives, from the conference and convention division, evaluation questionnaires about the food service. Task ID#: 8112071

Satisfy the requirements of a student who has a legitimate complaint about the food. To perform the task, the food service manager receives word, for example, that a student has found an insect in his or her food. The manager talks with the student, explaining that these types of accidents will occur during food preparation and ascertaining whether the student has a legitimate complaint. The manager resolves the conflict by suggesting alternatives to satisfy the student. These alternatives may include: making something for the student that is not currently being served on the cafeteria line, offering the student free cafeteria guest passes, or giving the student a pack of cookies. Task ID#: 8111231

Understands Systems (C15)

Know where to purchase food products. To perform the task, the food service manager knows the system and where to purchase food products. This includes knowing who to contact within the system, especially for an order which needs to be filled on short notice. Finally, the manager understands how the total food system runs in order to successfully operate the food service program component. Task ID#: 8151231

Monitors and Corrects Performance (C16)

Monitor employees' performance and take action to ensure adequate coverage in the case of insufficient staffing. To perform the task, the food service manager assesses the employees' skills and abilities; matches their individual talents to the workload and duties; monitors performance; provides feedback; and expects results. The manager also shifts employees or resources from one task to another to assure optimum quality of service to patrons and patients. Task ID#: 8162151

Evaluate the performance of workers and adjust work assignments to increase staff efficiency. To perform the task, the food service manager observes workers on the job to determine worker efficiency; polls clients to ask about worker efficiency; and makes work assignments according to performance. Task ID#: 8162071

Maintains and Troubleshoots Technology (C20)

Provide preventive maintenance on the dishwasher. To perform the task, the food service manager ensures that the equipment is maintained weekly, including cleaning, sanitizing, and reassembling the machine. If a problem exists with the machine, the manager locates the source of the problem and conducts repairs. The manager also determines when he or she is incapable of fixing the problem and, consequently, when to contact a maintenance person. Task ID#: 8201231

Troubleshoot cash registers, change register tapes, and reset registers to reflect correct transactions. To perform the task, the food service manager receives complaints from the cash register attendant and makes suggestions for fixing or adjusting cash registers; troubleshoots registers, when possible; makes service calls to the register vendors or manufacturers to obtain solutions to the problem, when needed; and applies a similar process to deal with problems associated with other cafeteria and dietary department equipment. Task ID#: 8202151

Listening (F05)

Determine the expectations of customers, staff, and school administrators by listening intently to their concerns. To perform this task, the food service manager meets with customers to glean information from them regarding a particular planned function; presents information from the customer to the supervisor and staff (other workers) at staff meetings and gathers feedback from them about the proposed function; and meets with school administrators to listen to their expectations for the overall operation of the food service unit. Task ID#: 7052071

Speaking (F06)

Negotiate with the customer regarding the details for a proposed function; give estimates for costs, dates, and other details; and relay information to staff, supervisors, and other organizations involved. To perform this task, the food service manager exchanges information with the client to determine the client's needs; presents a proposal for service; meets with supervisors and other staff to present proposed details and to discuss any potential problems; communicates with other organizations and vendors involved with the function in order to coordinate services and assignments; and makes follow-up telephone checks to supervisors, vendors, and service organizations to make sure that goods and services are being provided as agreed. Task ID#: 7062071

Decision Making (F08)

Make a variety of decisions on proceeding with a particular food service function. To perform this task, the food service manager speaks with the client to determine the client's exact expectations; determines the appropriateness of the food and food preparation; and determines the costs of food, labor, and overhead to give the client an estimate of the price per plate. The food service manager also determines what staff would be appropriate for the particular function; establishes which orders should be placed with which vendor; places orders; establishes a time when the food should be prepared (thawed, cut, cooked, etc.); makes assignments to subordinate supervisors and staff to cover the work details; concludes at what time rooms and other facilities should be set up; and makes calls to arrange for such setups to occur. Task ID#: 7082071

Choose a vendor based upon the quality and value of the food and beverage items offered. To perform the task, the food service manager contacts vendors of a particular food or beverage item to obtain price quotes; compares the prices quotes and decides upon the best vendor in terms of price and product quality; compares prices quoted to current market value; and decides to which vendor the contract should be awarded. Task ID#: 7082151

Problem Solving (F09)

Ensure that all work is done on time in the case of a scheduled employee calling in sick. To perform this task, the food service manager receives a call that a scheduled worker will be absent from work and decides how best to replace the worker. Some options that can be considered by the food service manager include: calling another worker to see if that worker can come in early; switching the positions of existing workers, such as having the baker help with cooking if the dessert is pre-done; and coming in earlier to perform the duties of the absent worker, if another worker is not available. Task ID#: 7091231

Responsibility (F13)

Recognize and accept the food service task at hand and determine the most efficient method for accomplishing the task. To perform this task, the food service manager delegates various tasks to make sure that the function is well covered; sets high standards of performance for workers and subordinate supervisors and follows up to make sure that standards are met; does not overlook any detail in covering the function; and attends food service functions to make sure that all goes as planned and to give the client and the school administrator assurances about the success of the function. As employees exhibit success in performing their tasks, the food service manager shows increased trust in them by giving them increased responsibility. The manager also tries to keep a happy work atmosphere at most functions so that workers enjoy the work time and begin to feel responsibility toward the job and the organization. Task ID#: 7132071

Assume responsibility for running the food service operation. To perform this task, the food service manager makes a commitment to the job that supersedes other needs; gives up personal plans to work extended hours for special events; determines a priority hierarchy for simultaneously scheduled events; and personally handles top priority events while delegating the remaining events to other workers. Task ID# 7131231.

Integrity/Honesty (F17)

"Cash out" a cash register. To perform the task, the food service manager initially provides the cafeteria cash registers with a specified amount of money. At the end of the day, the manager cashes out the registers by counting money and comparing the total to the amount recorded on the registers' tapes. He or she balances the tapes and examines discrepancies between the money and the total recorded on the tapes. Finally, the manager deposits the money and the deposit slip into a safe for subsequent deposit into the bank. Task ID#: 7172151

Industry Training Specialist (Based on Five Interviews)

Training specialists are employed in virtually every industry. They are responsible for planning, organizing, and directing a wide range of training activities. Trainers conduct orientation sessions and arrange on-the-job training for new employees. They help rank-and-file workers prepare for jobs requiring greater skill. They help supervisors to improve their interpersonal skills and to deal effectively with employees. Planning and program development is an important part of the training specialist's job. In order to identify and assess training needs within the firm, trainers may confer with managers and supervisors or conduct surveys. They also periodically evaluate training effectiveness.

Competencies		Mean	Std. Dev.
C10	Teaches Others	5.00	.00
C07	Interprets and Communicates Information	4.80	.45
C01	Allocates Time	4.60	.55
C12	Exercises Leadership	4.60	.55
C05	Acquires and Evaluates Information	4.20	.84
C06	Organizes and Maintains Information	4.00	1.41
C11	Serves Clients/Customers	4.00	1.73
C14	Works with Cultural Diversity	4.00	.71
C16	Monitors and Corrects Performance	3.80	1.30
C15	Understands Systems	3.80	.84
C18	Selects Technology	3.60	1.14
C13	Negotiates to Arrive at a Decision	3.60	1.67
C08	Uses Computers to Process Information	3.60	1.52
C17	Improves and Designs Systems	3.40	1.34
C04	Allocates Human Resources	3.20	1.64
C19	Applies Technology to Task	2.80	1.10
C03	Allocates Material and Facility Resources	2.80	1.10
C20	Maintains and Troubleshoots Technology	2.40	.89
C02	Allocates Money	2.20	.84

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F02	Writing	5.00	.00
F05	Listening	4.80	.45
F06	Speaking	4.80	.45
F01	Reading	4.60	.55
F14	Self-Esteem	4.40	.55
F11	Knowing How to Learn	4.40	.55
F16	Self-Management	4.20	.84
F15	Social	4.00	.71
F17	Integrity/Honesty	3.80	.84
F12	Reasoning	3.80	1.10
F08	Decision Making	3.60	.55
F09	Problem Solving	3.60	.55
F07	Creative Thinking	3.60	.89
F03	Arithmetic	2.40	.89
F10	Seeing Things in the Mind's Eye	2.40	.55
F04	Mathematics	2.20	1.30

Job: Industry Training Specialist

Allocates Time (C01)

Prioritize and complete projects in a timely manner. To perform the task, the industry training specialist organizes projects, prioritizing them in terms of importance; recognizes the time frame required for completion; schedules work to meet deadlines; balances time requirements to allow for breaks from the project to achieve success without burn-out; and checks off projects as they are completed. Task ID#: 8011481

Perform all curriculum-related activities within an established time frame. To perform the task, the industry training specialist meets with the department heads and employees requesting training to verify the time frame for developing and administering the training program; researches the subject of the training and collects materials needed to teach the training sequence effectively; develops instructional content such as lessons, exercises, and tests; organizes the teaching materials and follows the training schedule in order to cover the necessary material within a given training session. Task ID#: 8012181

Allocates Human Resources (C04)

Recruit potential trainers from within the client's organization for a "Train-the-Trainer" class. To perform the task, the industry training specialist identifies potential candidates from supervisory nominations; meets with the group of candidates to discuss the role of the trainer and to ask for volunteers; conducts the "Trainer-in-the Trainer" class; and performs follow up activities to monitor the progress of the newly-trained worker. Task ID#: 8041171

Interprets and Communicates Information (C07)

Collect information on skill requirements and convey the information in a concise and comprehensive manner, possibly through training sessions or using a procedures manual. To perform the task, the industry training specialist breaks a system or job task into components, identifies critical elements, and incorporates these into a draft training proposal; determines the types of work aids to be used to convey the information to trainees; conducts pilot training session and obtains feedback; incorporates suggestions into the final training course; implements the training course; evaluates the course periodically; and makes changes, as needed. Task ID#: 8071481

Clearly communicate information to training participants. To perform the task, the industry training specialist reads and analyzes the validity of a prepared corporate lesson plan script and researches additional information to enhance the plan; formulates behavioral objectives for the lesson; designs visual aids to enhance the instruction; presents the lesson plan script at the training sessions; uses accepted training techniques in the classroom, such as questioning participants, eliciting responses from trainees, and reviewing material presented; provides feedback through such techniques as role playing exercises; assigns an action plan to trainees to apply at their work stations, and measures retention and transfer of learning by evaluating the success of the assigned work plan in follow up meeting with trainees. Task ID#: 8071491

Develop and conduct training program. To perform the task, the industry training specialist receives an assignment to develop a training program; prepares a training outline; compiles selected information on the training topic; develops training materials, such as training manuals and visual aids; conducts a training session on the specific topic; tests trainees to assess the effectiveness of training; and provides follow-up training. Task ID#: 7071891

Participates as a Member of a Team (C09)

Serve as the chair of an education subcommittee. To perform the task, the industry training specialist meets with a group to identify topics and issues; elicits responses from group members; and involves the group in problem solving activities. Task ID#: 8091171

Teaches Others (C10)

Conduct specialized training sessions to provide instruction for specified employees. To perform this task, the industry training specialist consults with management to identify the training needs of the specified employee group; prepares training outline; compiles selected information on the training topic; develops materials, such as training manuals and visual aids; conducts the training session on the specified topic; tests trainees to assess the effectiveness of the training; and provides follow up training as needed. Task ID#: 8101891

Train staff to use their skills to perform job tasks. To perform the task, the industry training specialist performs the following activities: designs a training course to improve critical or weak job skills or elements; schedules and implements the training course; observes the trainees; interacts in order to involve the individual trainee more actively in the course (e.g., through questions, role play exercises); uses practice exercises to allow individuals to apply knowledge gained from the course; evaluates the training course; reviews and revises the course in response to suggestions; observes former trainees' performance in the work place to analyze the transfer of training knowledge to the job; and repeats the training for specific individuals, when necessary. Task ID#: 8101481

Prepare lesson plans which incorporate a variety of techniques to accommodate different learning styles. To perform the task, the industry training specialist researches training techniques which will appeal to different types of trainees; designs visual aids, handouts, and overhead transparencies relevant to the training subject which incorporate the research; and provides the information to the trainees. Task ID#: 7111491

Develop training that accommodates a personal learning style. To perform the task, the industry training specialist meets with the employees of the department requesting training to discuss training needs and objectives and develops a specialized training style that reflects the type of individuals being trained. Task ID#: 7112181

Exercises Leadership (C12)

Persuade new employees to adopt and adhere to high standards of performance. To perform this task, the industry training specialist distributes copies of the company's policies and standards to new employees; stresses the importance of and encourages adherence to the company's rules; and acts as a model employee to exemplify the company's policies and standards. Task ID#: 8121891

Train employees so that course objectives are met and participants learn the needed job duties. To perform the task, the industry training specialist trains and supervises employees of a particular unit by developing well-defined work plans to meet unit objectives; implements and/or evaluates existing agency training programs to enhance their effectiveness; conducts briefings and/or demonstrations of training programs to ensure the use of proper materials and appropriate instructional techniques; performs periodic evaluations of training staff by conducting review sessions and by attending and observing training sessions; develops training programs by establishing objectives, researching content, and designing lessons and related materials; conducts classroom training to instruct employees in the agency's programs or in needed skills; collects evaluations and comments regarding classroom procedures and objectives; and revises teaching methods, as needed, to ensure that participants learn the program's objectives. Task ID#: 7132181

Understands Systems (C15)

Conduct orientation sessions for new employees. To perform this task, the industry training specialist becomes familiar with the company's history, purpose, goals/objectives, and organizational structure; communicates this information to new employees; and responds to questions of orientation participants, applying knowledge of company. Task ID#: 8151891

Monitors and Corrects Performance (C16)

Monitor the performance of self-directed work teams. To perform the task, the industry training specialist gathers information about the group by meeting with the group and supervisor both formally and informally, obtaining meeting notes, and walking through work areas to detect problems; and implements corrective action through the supervisor when the work team deviates from the team's goals. Task ID#: 8161171

Monitor the effectiveness of agency training programs, modifying training techniques, as needed, to ensure the relevance of the material and attainment of training objectives. To perform the task, the industry training specialist keeps abreast of current training information so that training participants receive the most updated information; monitors the agency training programs to ensure that they meet the specified training objectives; reviews participants' evaluation forms; interviews the program's participants and their managers to assess whether program goals were achieved; and changes training techniques, procedures, materials, or training time, if needed, in order to achieve the program's objectives. Task ID#: 8162181

Improves and Designs Systems (C17)

Determine whether the training department meets the needs of company personnel. To perform the task, the industry training specialist distributes and analyzes post-training evaluation forms, noting any trends; restructures training session, when necessary, incorporating suggestions from the forms; and conducts needs assessments within departments of the company to determine specific training requirements. Task ID#: 8171491

Selects Technology (C18)

Select a method for use in training new operators of a particular machine. To perform the task, the industry training specialist identifies the needed training materials; uses a documentation program that requires the operator to sign off on each task as training is completed; develops or selects a written test; observes the worker in a hands-on test, and certifies the worker as qualified. Task ID#: 8181171

Select the methodology to use when training participants in a classroom setting. To perform the task, the industry training specialist conducts research to determine the technology available to apply in a classroom setting; selects the appropriate technology and incorporates the technology into the classroom; demonstrates the application of the technology to job tasks; evaluates the transfer of the training knowledge to actual job performance; and measures productivity. Task ID#: 8181481

Applies Technology to Task (C19)

Use available technology to enhance the professionalism of training and to conserve time. To perform the task, the industry training specialist selects specific software programs, such as word processing and graphics, to prepare training session lesson plans; and prepares flip charts and overhead transparencies to enhance lesson plan presentation for classroom sessions. Task ID#: 8191491

Apply understanding of computer systems and software programs to the design of a training course. To perform the task, the industry training specialist receives instruction in computer systems and software applications and determines the type of documentation and information available; experiments with the systems and software programs to design visuals and develop procedures; seeks advice from computer experts regarding the systems; determines the best method for instructing a group using computer-based training; conducts training session and implements training course; and evaluates training session and revises course, as needed. Task ID#: 8151481

Reading (F01)

Read scripts of lesson plans, analyze and interpret content, and convey information to trainees. To perform the task, the industry training specialist reads scripts of lesson plans; annotates the scripts and breaks them down into relevant parts; expands on the existing text and incorporates experiences into the lesson plan; researches additional information on the subject of the training; and incorporates outside information with the lesson plan. Task ID#: 7011491

Writing (F02)

Write training manuals to provide instruction to trainees. To perform this task, the industry training specialist researches the training topic; compiles desired visual aids; writes and produces printout of text for the training manual; cuts, arranges, and pastes text and visual aids in a desired presentation format for the training manual; photocopies, cuts, and pastes pages; and gives photocopied pages to the clerical staff for the assembly and reproduction of the training manual. Task ID#: 7021891

Write a procedures manual to assist new employees in learning job tasks. To perform the task, the industry training specialist performs the following activities: visits the work area of a given department; observes a job being performed and records information gathered; determines work tasks within each documented job duty; itemizes these work tasks on paper; presents a copy of the drafted information to the observed worker and key supervisory personnel for validation; collects examples of work aids, equipment, or tools required for effective job performance; designs visual aids to illustrate the use of the work aids in performing job tasks; presents a copy of the visual aids designs to the worker and key supervisory personnel for verification; writes a final copy of the procedures, assembling the information in manual form; distributes the procedures manual to the department manager; and meets with the manager on a quarterly basis to review, evaluate, and update the manual. Task ID#: 7021481

Speaking (F06)

Conduct classroom training to instruct employees concerning their agency's programs, procedures, job skills, generic skills, and other job-related information. To perform the task, the industry training specialist assesses needs through discussions with department heads or visits to the relevant departments; conducts meetings or leads group discussions regarding the development, implementation, and evaluation of the training program; develops the training program by writing objectives, researching content; designs lessons and related materials; discusses plans and objectives with the relevant department heads; trains employees on the specified subject or skill; receives evaluations and comments regarding classroom procedures and/or objectives; and revises the training, if needed. Task ID#: 7062181

Knowing How to Learn (F11)

Acquire knowledge of an unfamiliar subject to develop/conduct training programs. To perform this task, the industry training specialist reads literature on the training topic; attends classes, seminars, and lectures on the training topic; views videotape presentations on the issue; and consults with individuals who have expertise in the topic. Task ID#: 7111891

Reasoning (F12)

Teach the topic of group problem solving. To perform the task, the industry training specialist uses exercises, such as the "paper airplane" which he or she has decided will effectively illustrate the concept of group dynamics, and instructs the group to make and "fly" a paper airplane (or employs other exercise), using a teamwork approach to solve problems. Task ID#: 7121171

Responsibility (F13)

Serve as the personification of an exemplary employee. To perform this task, the industry training specialist reads/learns the company's policies and standards of performance; internalizes commitment to the company's policies/standards; and acts as a model employee to exemplify company policies/standards. Task ID#: 7131891

Assume responsibility for completing an assigned project. To perform the task, the industry training specialist determines the scope of a project and its time frame; organizes the project into logical sections or steps to meet the time frame; proceeds through the steps, using self-motivation techniques; recognizes problems and seeks assistance from others; and aims to complete the project prior to the specified time limitation in order to build in flexibility to deal with needed revisions. Task ID#: 7131481

Self-Management (F16)

Develop and implement an annual work plan. To perform the task, the industry training specialist assesses an organization's training needs, identifies goals, and sets objectives; presents recommendations to management for approval of resources; monitors progress through monthly status reports; reassesses an organization's training needs continuously; and maintains flexibility in making program adjustments, as needed. Task ID#: 7161171

Schedule the time needed to complete a variety of concurrent projects. To perform the task, the industry training specialist prioritizes projects and time daily; sets intermediate goals to complete on a periodic schedule; separates goals into small tasks to be completed step-by-step; avoids procrastination and attempts to finish all tasks on time; and checks off projects as they are completed. Task ID#: 7161491

Hotel Account Executive/Sales Executive (Based on Four Interviews)

Hotel account executives discuss the services offered at their establishment. They answer questions about the nature and cost of the services and try to persuade potential customers to purchase the services. Hotel account executives contact government, businesses, and social groups to solicit convention and conference business for their hotel. They determine prospective clients' needs, outline the types and prices of services offered by the hotel, and prepare contracts when clients reserve space at the hotel.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C09	Participates as a Member of a Team	4.75	.50
C01	Allocates Time	4.75	.50
C07	Interprets and Communicates Information	4.75	.50
C14	Works with Cultural Diversity	4.50	.58
C05	Acquires and Evaluates Information	4.25	.96
C06	Organizes and Maintains Information	4.25	.96
C15	Understands Systems	4.25	.50
C13	Negotiates to Arrive at a Decision	4.00	.82
C17	Improves and Designs Systems	4.00	.82
C16	Monitors and Corrects Performance	3.75	.96
C03	Allocates Material and Facility Resources	3.50	1.73
C12	Exercises Leadership	3.50	.58
C10	Teaches Others	3.25	.50
C19	Applies Technology to Task	3.25	1.71
C04	Allocates Human Resources	2.75	.96
C08	Uses Computers to Process Information	2.25	1.26
C02	Allocates Money	1.50	.58
C20	Maintains and Troubleshoots Technology	1.25	.50
C18	Selects Technology	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F06	Speaking	5.00	.00
F05	Listening	5.00	.00
F01	Reading	4.75	.50
F08	Decision Making	4.75	.50
F13	Responsibility	4.75	.50
F15	Social	4.75	.50
F16	Self-Management	4.75	.50
F02	Writing	4.50	.58
F07	Creative Thinking	4.50	.58
F09	Problem Solving	4.50	.58
F17	Integrity/Honesty	4.50	.58
F14	Self-Esteem	4.50	.58
F12	Reasoning	4.00	1.15
F11	Knowing How to Learn	3.75	1.50
F10	Seeing Things in the Mind's Eye	3.25	.96
F04	Mathematics	2.25	.50
F03	Arithmetic	2.00	.00

Job: Hotel Account Executive/Sales Executive

Allocates Time (C01)

Pre-plan weekly activities. To perform the task, the account executive makes appointments with potential customers; prioritizes customers in order of perceived importance, using "prime time" slots for more important clients; completes paperwork and computer work in non- prime time hours; and maintains a flexible schedule which is easily adjusted to accommodate telephone calls in different time zones, etc. Task ID#: 8011081

Schedule time to achieve the maximum number of sales contacts to sell hotel services. To perform the task, the account executive reviews the computerized client list daily; reviews manual file of potential clients; prepares list of sales contacts to be made; checks daily calendar for scheduled appointments; and organizes daily work tasks to efficiently make telephone calls and personal visits, confirm and fill scheduled appointments, and maintain a follow up of client accounts. Task ID#: 8011471

Allocates Material and Facility Resources (C03)

Assign meeting and sleeping rooms. To perform this task, the hotel account executive contacts the group leader to determine the size of the group and ascertains availability of accommodations; determines the need for additional services, such as food, refreshments, lecterns, and audio-visual equipment; makes sure that the correct number of sleeping and meeting rooms are reserved and set up as required for incoming group; and arranges for transportation, if needed, from airport or corporate offices. Task ID#: 8031731

Schedule events and allocate hotel space and staff for the event. To perform this task, the hotel account executive talks to the client to ascertain the date of the event; checks the function book to see if the date is open; listens to the client for details of the event (e.g., color scheme, type of food); determines the budget with which the client has to work; agrees to details (e.g., cost, schedule); enters the date into the function book; prepares a cover letter and contract; sends out the contract to be signed by the client; and notifies the staff of the upcoming event and all of the details, such as number of guests, rooms required, and time of the event. Task ID#: 8031971

Acquires and Evaluates Information (C05)

Contact customers, co-workers, and vendors to obtain needed information and then determine how best to utilize facilities. To perform this task, the hotel account executive contacts customers to determine their needs and evaluates information to determine how best to fill those needs; contacts clients to discuss arrangements; confers with staff to ensure that all arrangements are in place; studies weekly bulletin from a visitors' or convention bureau to find out which groups are planning meetings in that city; and checks credit rating of prospective customers through credit bureau. Task ID#: 8051731

Organizes and Maintains Information (C06)

Maintain, update, and create files for each event and client. To perform this task, the hotel account executive starts a file for each event by listing the name of the client on a file folder; documents the details of the event on paper (including date, time, type food, etc.); places the information into the appropriate file folder; updates the file folder with additional information, such as the signed contract; and places the file folders into the file cabinet in alphabetical order. Task ID#: 8061971

Interprets and Communicates Information (C07)

Receive client requests and convey information to hotel staff to ensure the delivery of satisfactory service to the client. To perform the task, the account executive receives an inquiry for hotel services; researches space availability for lodging or food service on the requested date; discusses arrangements with the client; verifies the booking date; prepares a contract; confers with relevant hotel department heads to inform them of the services required; and delivers copy of contract itemizing services to be provided by the specific department. Task ID#: 8071471

Serves Clients/Customers (C11)

Work with clients and customers to satisfy expectations. To perform this task, the hotel account executive contacts customers prior to their arrival at the hotel to determine their needs; greets clients upon arrival at hotel; communicates with other hotel personnel the need to extend special services to group and corporate customers; follows up to ensure that facilities are set up as requested, and that all special needs have been met; and confers with group leader upon departure to make sure that service was satisfactory and to thank them for using the hotel. Task ID#: 8111731

Book specific events for clients at the hotel. To perform this task, the hotel account executive greets the client in the office; talks to the client to ascertain the date of the event; checks the function book to see if the date is open; listens to the client for details of the event; determines the budget with which the client has to work; agrees to details; tests; and enters the date into the function book; prepares a cover letter and contract (documenting the details of the event); sends out the contract to be signed by the client; reviews the event with the client after it occurs; and writes up the review and places it in the file for the event. Task ID#: 8111971

Understands Systems (C15)

Participate in functions with outside organizations to generate potential business and network with others to generate hotel business. To perform the task, the account executive selects an organization in which to become involved based upon its potential return in sales; analyzes the organization to see who is involved and what activities are performed or planned; networks within the organization's membership to determine the best potential clients; and becomes actively involved in the organization by serving on committees and running for office in order to gain respect and enhances reputation as solid businessperson. Task ID#: 8151081

Monitors and Corrects Performance (C16)

Conduct follow-up visits with a client and correct staff performance to ensure that services delivered meet the conditions of the sales agreement. To perform the task, the account executive reviews the client's contract to verify the services requested; contacts the client and receives feedback on services provided; prepares a memo to the general manager detailing suggested policy or procedure modifications to address any identified problem; contacts the head of the department of any identified problem area; and negotiates methods to correct procedures to avoid future service-related complaints; and follows up to ensure that corrective measures have been implemented. Task ID#: 8161471

Improves and Designs Systems (C17)

Improve and design a new menu system. To perform this task, the hotel account executive/sales executive looks at the menu from the previous year; prices out the menu by talking to the chef and purveyors; updates the menu system and gives a critique to the general manager; makes appropriate changes to the menu; and sends the menu out for printing. Task ID#: 81711971

Applies Technology to Task (C19)

Use the reservation computer to check reservations and the word processing function of the computer for correspondence and memos. To perform this task, the hotel account executive uses the reservation computer to reserve the required number of rooms for an incoming group; activates direct computer link to credit bureau to qualify new customers; assigns room numbers to incoming groups using availability list on the computer; checks occupancy rate to report at monthly sales meeting; and uses computer for processing correspondence and interoffice memos. Task ID#: 8191731

Assign codes to clients' accounts to track client occupancy of facilities and to determine booking rate. To perform the task, the account executive assigns a numerical code to a client list to identify a particular client's use of lodging or hotel food services and determines the client's booking rate based upon his or her use of hotel facilities. Task ID#: 8191471

Reading (F01)

Qualify client accounts to company standards. To perform the task, the account executive reviews a computerized client list; determines accounts requiring qualification or assessment for sound business practices and solvency; researches business directories to gain knowledge of the client's business and records notes for a client file; contacts individuals in order to gain relevant company information; records qualifying information on the appropriate form; prepares a sales or catering contract; and delivers it to the client. Task ID#: 7011471

Listening (F05)

Listen to clients to obtain exact details of events. To perform this task, the hotel account executive graciously greets the clients in the office, maintaining eye contact; talks to the client to ascertain the date of the event; checks the function book to see if the date is open; listens for details of the event; determines the budget with which the client has to work; agrees to details; enters the date in the function book; prepares a cover letter and contract (documenting the details of the event); and sends out the contract to be signed by the client. Task ID#: 7051971

Solicit business from potential customers over the telephone. To perform the task, the account executive first evaluates who to call based upon their business potential. After this decision is made, the representative calls and speaks with a potential customer, discussing the customer's needs and how the hotel can meet these needs; listens to the customer's responses and inquiries to ascertain the customer's needs; if the customer has no current needs, the account executive closes the call but offers to follow up; and if the customer has needs which can be met by the hotel, provides a contract for services. Task ID#: 7051081

Speaking (F06)

Speak to clients and co-workers to arrange functions to be held at the hotel. To perform this task, the hotel account executive presents a proposal to the customer and discusses changes, if needed, with the customer; informs staff of plans for upcoming function; contacts regular clients to inform them of special services and packages available; and speaks at corporate meetings and seminars to inform regular and potential clients of hotel services. Task ID#: 7061731

Creative Thinking (F07)

Offer a creative alternative to a customer who wants a service in order to set the hotel's product apart from that of others. To perform the task, the account executive identifies what the customer wants; generates unusual ways of giving the customer what he/she requests (e.g., a different kind of reception); offers additional services to cater to the customer's needs in order to spark his or her interest and highlight the uniqueness of the hotel. Task ID#: 7071081

Problem Solving (F09)

Solve problems related to group hotel services. To perform this task, the hotel account executive arranges for additional rooms if the number of arriving guests is larger than the number of reservations booked; adjusts times and dates when guests change their minds about a planned function; sorts out meeting rooms when they have been double-booked; moves guests when they are dissatisfied with their room assignments; and provides extra services not usually included in the package when requested by guests. Task ID#: 7091731

Responsibility (F13)

Prioritize the client contact schedule daily to determine which are the most profitable accounts to pursue. To perform the task, the account executive reviews the computerized client list daily; reads newspapers and association publications to gain information on potential accounts; identifies regular clients and potential new clients to contact; contacts clients in order to schedule appointments; and follows up with periodic sales calls to secure accounts. Task ID#: 7131471

Social (F15)

Relate to guests, visitors, and co-workers in the hotel. To perform this task, the hotel account executive meets incoming group at the door, welcomes them to the hotel, and introduces self as person to contact for help; determines needs of group and what facilities will be needed to make them comfortable; makes presentations to various groups to sell hotel services; attends meetings of professional societies to maintain professional contacts; and entertains prospective customers, including giving tours of the hotel. Task ID#: 7151731

Assert oneself and network with people at conventions in order to obtain hotel business. To perform the task, the account executive asserts him/her self in social situations; joins conversations that reflect a shared interest; and listens and chooses appropriate words and their timing. Task ID#: 7151081

Integrity/Honesty (F17)

Schedule an event with details that the hotel can actually provide. To perform this task, the hotel account executive talks to the client to learn the details of the event; tells the client what the hotel realistically can provide; tries to keep the client by being flexible (but tries not to overextend the hotel staff); books the event in the function book; prepares a cover letter and contract (documenting the details of the event); and sends out the contract to be signed by the client. Task ID#: 7171971

Hairstylist/Cosmetologist (Based on Four Interviews)

Cosmetologists (also called beauty operators, hairstylists or beauticians/skin-care specialists) shampoo, cut, and style hair, and advise patrons on how to care for their hair. Although styles change over time, the cosmologist's task remains the same—to help people look attractive. Hairstylists frequently straighten or permanent wave a patron's hair to maintain the shape of a hair style. They also lighten or darken hair color. Some cosmetologists specialize in manicures and pedicures. Most cosmetologists make appointments and keep records of hair color or other special care formulas they use on their regular patrons. They also keep their work area clean and sanitize their hairdressing implements. Some sell hair products or other cosmetic supplies.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C01	Allocates Time	4.50	.58
C07	Interprets and Communicates Information	4.00	.82
C09	Participates as a Member of a Team	3.75	1.50
C14	Works with Cultural Diversity	3.50	1.73
C13	Negotiates to Arrive at a Decision	3.25	.50
C19	Applies Technology to Task	3.25	1.71
C18	Selects Technology	3.00	1.83
C17	Improves and Designs Systems	3.00	1.63
C15	Understands Systems	3.00	.82
C16	Monitors and Corrects Performance	3.00	1.41
C12	Exercises Leadership	2.50	.58
C05	Acquires and Evaluates Information	2.50	1.73
C02	Allocates Money	2.50	1.73
C04	Allocates Human Resources	2.25	1.26
C20	Maintains and Troubleshoots Technology	2.25	1.50
C03	Allocates Material and Facility Resources	2.00	1.41
C06	Organizes and Maintains Information	2.00	1.15
C10	Teaches Others	1.75	.96
C08	Uses Computers to Process Information	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	5.00	.00
F13	Responsibility	4.75	.50
F15	Social	4.75	.50
F06	Speaking	4.75	.50
F17	Integrity/Honesty	4.50	.58
F14	Self-Esteem	4.50	.58
F07	Creative Thinking	4.25	.96
F08	Decision Making	4.00	1.15
F09	Problem Solving	4.00	.82
F16	Self-Management	4.00	1.15
F01	Reading	4.00	.82
F10	Seeing Things in the Mind's Eye	4.00	.82
F11	Knowing How to Learn	4.00	.82
F12	Reasoning	3.50	.58
F03	Arithmetic	3.00	1.83
F02	Writing	2.50	.58
F04	Mathematics	2.00	.82

Job: Hairstylist/Cosmetologist

Allocates Time (C01)

Schedule appointments for hair and beauty care. To perform the task, the cosmetologist enters all appointments into the schedule book at the beginning of each week and month or during slack periods. This reduces the opportunity for confusion. All other appointments, such as a request from a walk-in for a haircut or permanent wave, are scheduled based upon knowledge of time needed for the requested service. The cosmetologist also knows when to refuse a potential customer based upon time constraints. Task ID#: 8011281

Follow the appointment schedule within the allotted time frame. To perform the task, the hairstylist answers the telephone and schedules appointments according to customer requests. If a conflict arises, the stylist suggests an alternate time and date for the appointment. He or she verifies that enough time has been allocated to a customer depending upon the customer's needs (cut, color, frosting, etc.), and follows the appointment book so as to complete each appointment within a timely manner and keep customers' waiting time to a minimum. Task ID#: 8012161

Acquires and Evaluates Information (C05)

Take steps to keep abreast of new and emerging styles and techniques. To perform the task, the hairstylist subscribes to a variety of hairstyling and cosmetology magazines, including domestic and international magazines; reads magazine articles and notes pictures of new and emerging hairstyles; attends fashion shows and makeup conferences sponsored by leading manufacturers; takes notes on interesting products and on new hair cutting techniques to share with customers; orders videotapes on new coiffures to learn new styles and cutting techniques; evaluates the information gathered from magazines, meetings, conferences, and videotapes; draws conclusions about the information; and incorporates valued information into daily task performance. Task ID#: 8052161

Organizes and Maintains Information (C06)

Gather, organize, and enter information on each client in the customer record file. To perform this task, the hairstylist/cosmetologist keeps notes on a customer's comments or hair conditions; records new customer information after each visit, and reviews information from the customer log between appointments to determine if the information is current. Task ID#: 8062021

Maintain records of sales receipts, commissions, rental fees and product costs, and keep individual customer record cards. To perform the task, the cosmetologist keeps track of sales receipts for services rendered and products sold in order to calculate commissions and taxes. The cosmetologist also keeps a record of the cost of renting the work booth in a case where the worker rents space rather than purchasing a separate shop. Additionally, the cosmetologist keeps track of costs incurred for purchasing supplies in order to obtain reimbursement. Finally, individual cards are maintained for each customer. These cards include the name, address, and telephone number of the customer, along with such pertinent information as formula for hair color, listing of medications, or other information which would aid the cosmetologist in serving the customer. Task ID#: 8061281

Interprets and Communicates Information (C07)

Read and interpret information about beauty products and techniques, and communicate this information to other operators and customers. To perform the task, the cosmetologist gains information about new products or techniques; decides, based on knowledge of cosmetology and clientele, which products would be best suited for particular procedures; communicates information about products and techniques to other operators and customers; and notifies a manufacturer or trade publication about customers' reactions to a product or technique. Task ID#: 8071581

Serves Clients/Customers (C11)

Attend to the hair and beauty care needs of the customer. To perform the task, the cosmetologist communicates with the customer regarding desired hair care or beauty services. The worker then analyzes the hair or the objects of other beauty needs in order to identify the methods for attaining the desired result. For instance, before making suggestions and comments about a requested hair service, the cosmetologist would consider the customer's lifestyle, hair condition, and expectations. After the assessment, the cosmetologist communicates his or her feelings about the desired treatment or product clearly and diplomatically to the customer and tries to steer the customer away from products or treatments which are felt to be unsatisfactory based upon the customer's needs. Finally, the cosmetologist tries, at all times, to satisfy the customer's needs in a sensitive and ethical manner. Task ID#: 8111281

Provide the maximum service to clients. To perform the task, the cosmetologist greets customers with enthusiasm and initiates conversation, referring to each customer by name. The cosmetologist inquires as to customers' hair and beauty needs and desires, especially in the case of new customers; makes customers comfortable prior to beginning services; maintains a dialogue with customers during services, if they indicate an interest; and expresses appreciation to customers at the conclusion of the service. Task ID#: 8111581

Understands Systems (C15)

Understand how a beauty salon operates and perform the job within that framework. To perform the task, the cosmetologist knows state laws requiring sanitation in a beauty salon and sterilization of hand tools. Further, he or she understands the work flow of a salon—which includes initial contact with the customer, the scheduled appointment, the importance of maintaining the schedule, accepted procedures for cutting, styling, and applying chemicals to the hair; the use of equipment such as hair dryers or ultra-violet or heat lamps for perming or coloring hair, and operation of the cash register. Task ID#: 8151281

Monitors and Corrects Performance (C16)

Monitor trends in the hairstyling industry, apply new concepts in hair design to the hairstylist's own styling knowledge, and learn from previous experience with customers. To perform this task, the hairstylist/cosmetologist studies new designs and technology in hairstyling; attends refresher courses offered by the hairstyling industry to update knowledge; studies various manuals to determine how to avoid or correct mistakes in hair care methods; and checks equipment to assure proper operation and to avoid malfunctions that could cause styling problems for customers. Task ID#: 8162021

Monitor changes within the industry, distinguish worthwhile or popular trends, and adapt these changes to job activities. To perform the task, the hairstylist monitors new industry trends by reading magazines and talking with customers; suggests new styles to customers who want a change in appearance; and adapts a new hairstyle to a customer's facial and physical structure. Task ID#: 8162161

Improves and Designs Systems (C17)

Improve and streamline services. To perform the task, the cosmetologist maintains records of the effectiveness and customer acceptance of various products and techniques. The cosmetologist also questions customers about their reactions to the products and techniques; ascertains, independently and through conversations with others, improved methods of operation; and brings to the attention of management new products, techniques, or services that could improve the shop's image. Task ID#: 8171581

Selects Technology (C18)

Select the appropriate instrument or product to be used in cutting, styling, or coloring hair. To perform the task, the cosmetologist determines the goal or purpose of the customer's visit, such as cutting, perming, styling, coloring, manicuring, body waxing, or rehydrating the skin, and selects the appropriate tools to deliver the desired result. When hair services are requested, the cosmetologist uses a prepared solution and several strands of a customer's hair to test the texture of the hair for porosity. Further, when a particular hairstyle is requested, the cosmetologist identifies the specific product or tool which will deliver the desired result. Task ID#: 8181281

Applies Technology to Task (C19)

Understand the overall operation and the proper procedures for setting up and operating machines and equipment and for handling the variety of chemicals used in the hairstyling process. To perform this task, the hairstylist/cosmetologist reviews operation manuals for new equipment and hairstyling manuals to learn about new solutions or procedures being introduced to the salon, and attends equipment and procedure demonstrations to learn new methods of hairstyling. Task ID#: 8192021

Listening (F05)

Listen to customers to gain knowledge of the services required. To perform the task, the cosmetologist greets customers upon their arrival; listens to customers' responses to questions about the services required; confers with customers about methods to achieve the desired results; listens to customers' comments while being serviced; and solicits comments from a customer after completion of service to ascertain his or her level of satisfaction. Task ID#: 7051581

Creative Thinking (F07)

Create a style or cut or suggest a service that will best suit the customer's features. To perform the task, the hairstylist studies the customer's hair, including its length, thickness, texture, color, and previous style; studies the customer's facial structure to determine the cut or color that will best complement that structure; and trims, styles, or cuts the customer's hair according to his or her request, using creative lines and following the customer's hair pattern. Task ID#: 7072161

Decision Making (F08)

Offer the customer alternatives to a requested cut or style, taking into account the desired style and qualities of the customer's hair. To perform the task, the hairstylist analyzes the condition of the customer's hair, assesses whether the existing condition would be appropriate for the requested service, and decides whether or not the requested additional perming or color treatment is feasible. He or she may decide that long-term reconditioning is best for the hair. Next, the cosmetologist evaluates both the texture of the hair and the shape of the face, head, and body in order to suggest the most appropriate cut and style for the customer. He or she offers the customer alternatives, and negotiates to agree upon the most acceptable hair cut and style. Task ID#: 7081281

Seeing Things in the Mind's Eye (F10)

Visualize the completed hairstyle described by the customer, taking into account the customer's physical appearance and hair quality. To perform the task, the cosmetologist questions the customer about the type of service desired; describes to the customer available types of coloring and styling; shows the customer photographs, drawings, and samples of available tints and styles; confers with the customer about choices, recommending those that seem most suitable; and keeps the image of the finished look in mind while performing the service. Task ID#: 7101581

Knowing How to Learn (F11)

Learn new coloring and styling techniques. To perform the task, the hairstylist attends out-service training on new products, which is given by beauty products suppliers; reads promotional and educational literature on various products distributed by beauty supply companies; confers with other cosmetologists to learn about new methods and techniques; and listens to clients to learn how to provide better individual service. Task ID#: 7111581

Responsibility (F13)

Keep up with daily appointments and keep the work area tidy, to ensure that customers are satisfied at all times. To perform the task, the hairstylist reviews the appointment book to ascertain whether all the time slots for a given day have been filled and that no overbooking has occurred. If conflicts arise, the stylist calls the customer to reschedule the appointment. The stylist serves each customer in a timely manner in order to keep to the daily schedule. He or she also sweeps the floor and cleans the sink and counter area to ensure that the salon remains clean, sanitary, and professional looking. Task ID#: 7132161

Social (F15)

Empathize with customers and convey a feeling of friendship and understanding. To perform the task, the cosmetologist greets customers with warmth and enthusiasm, initiates conversation on general subjects to put the customer at ease, and introduces the subject of how the operator can be of service to the customer. The cosmetologist also discusses customers needs, emphasizing service; suggests, in a positive way, services which would benefit the customer; explains products which would help to bring about the desired result; expresses a positive feeling about the finished product; and solicits the customer's opinion. Task ID#: 7151581

Demonstrate understanding, friendliness, empathy, and politeness toward clients. To perform the task, the cosmetologist listens intently to a customer's conversation to gain the customer's confidence and to learn more about the customer; asserts self to recommend ideas to the customer about possible hair styles and beauty treatments; learns as much as possible about the customer during the customer's visit to the salon; shows friendliness toward the customer; assumes the customer is usually right in decisions unless the customer's ideas are too "extreme" to be practical, then presents more practical alternatives to the customer for consideration. Task ID#: 7152021.

Self-Management (F16)

Work on a strict time schedule in order to serve customers who have specific appointments or purposes. To perform the task, the cosmetologist approaches the work situation in a calm manner, giving undivided attention to the particular customer and situation at hand. The cosmetologist completes one task at a time in order to reduce confusion and to give the customers the personal care that is required by the job. If the cosmetologist is working in a one or two-person shop, his or her time must be divided between answering the telephone, scheduling appointments, running the cash register, dealing with vendors, and providing hair care services to customers. In this case, the cosmetologist paces himself or herself and adjusts the schedule when needed to compensate for interruptions. Task ID#: 7161281

Beauty Shop Owner (Based on Four Interviews)

In addition to the tasks cosmetologists perform, shop owners have managerial duties which include hiring and supervising workers, keeping records, and ordering supplies. Shop owners are also responsible for promoting and marketing their services.

Competencies		Mean	Std. Dev.
C10	Teaches Others	5.00	.00
C11	Serves Clients/Customers	4.75	.50
C12	Exercises Leadership	4.75	.50
C04	Allocates Human Resources	4.75	.50
C02	Allocates Money	4.75	.50
C17	Improves and Designs Systems	4.50	.58
C09	Participates as a Member of a Team	4.50	.58
C01	Allocates Time	4.25	.50
C13	Negotiates to Arrive at a Decision	4.00	.82
C16	Monitors and Corrects Performance	3.75	1.26
C03	Allocates Material and Facility Resources	3.75	.96
C20	Maintains and Troubleshoots Technology	3.75	1.89
C19	Applies Technology to Task	3.50	1.73
C06	Organizes and Maintains Information	3.50	.58
C15	Understands Systems	3.50	1.29
C18	Selects Technology	3.50	1.73
C14	Works with Cultural Diversity	3.50	1.73
C05	Acquires and Evaluates Information	2.50	.58
C08	Uses Computers to Process Information	1.75	.96
C07	Interprets and Communicates Information	1.75	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F08	Decision Making	5.00	.00
F05	Listening	5.00	.00
F09	Problem Solving	5.00	.00
F17	Integrity/Honesty	5.00	.00
F14	Self-Esteem	4.75	.50
F10	Seeing Things in the Mind's Eye	4.75	.50
F06	Speaking	4.50	1.00
F16	Self-Management	4.50	.58
F15	Social	4.50	1.00
F11	Knowing How to Learn	4.25	.50
F01	Reading	4.25	.96
F07	Creative Thinking	4.00	1.41
F12	Reasoning	4.00	.00
F03	Arithmetic	3.50	1.91
F02	Writing	3.25	1.26
F04	Mathematics	2.00	2.00

Job: Beauty Shop Owner

Allocates Time (C01)

Allocate the time to handle various salon duties in one day, including special tasks, payroll duties, staff training, and regular client load. To perform the task, the beauty shop owner recognizes and lists frequent tasks to be completed; honestly assesses the time to perform the tasks, providing a cushion of free time to handle emergencies; determines the frequency with which tasks are completed; sticks to the developed schedule so as not to fall behind on task performance; and frequently assesses the accuracy of the tasks and priorities and makes appropriate changes. Task ID#: 8011421

Allocates Money (C02)

Maintain balanced daily sales sheets. To perform the task, the beauty shop owner designs a user friendly day sheet, trains the receptionist to balance the day sheet, oversees and regularly verifies the sheet, crosschecks charges and checks to insure their validity, and maintains a list of funds borrowed from the drawer by staff. Task ID#: 8021361

Determine cash on hand to establish what is available for such items as supplies and advertising. To perform this task, the beauty shop owner balances the checkbook at the end of the week; determines the following week's expenses; and allocates available funds for various purposes. Task ID#: 8021791

Allocates Human Resources (C04)

Evaluate the staff's people and technical skills for promotion and pricing purposes. To perform the task, the beauty shop owner watches staff members' activities, such as whether they are building a return clientele and whether they display adequate technical skills. Performance appraisal and pricing level decisions are based upon these observations. Task ID#: 8041101

Allocate specific staff to particular customers based upon a perceived match. To perform this task, the beauty shop owner assesses and understands the personality and technical skills of individual staff members; uses this information to match clients who want other services with stylists who have complementary personalities and appropriate technical skills. Task ID#: 8041101.

Organizes and Maintains Information (C06)

Keep track of a variety of business affairs using a planning book. To perform this task, the beauty shop owner receives an item requiring entry, such as an invoice to be paid, a magazine subscription, a bill for taxes, or notice to call a customer. The owner then records the item in the planning book for the appropriate day; and responds to items for that day. Task ID#: 8061791

Maintain a record of inventory, including product sales, in order to evaluate a given product line. To perform the task, the beauty shop owner puts product information into the personal computer and obtains a printout of a given product line, including a breakdown of the amount of the product that has been sold. This printout breaks down data in a variety of ways, including by gender of buyer, etc. The owner uses this information to make decisions on product purchases. Task ID#: 8061101

Organize incoming information about different products. To perform the task, the beauty shop owner receives information about a given product (e.g., directions for use, contents, and material safety data sheet [MSDS]) and organizes it so that the appropriate information is provided to employees. The owner allows employees to decide which information to pass to the clients. The owner also maintains and ensures easy access to the products' MSDS's. These forms need to be accessed if a client has an adverse reaction to a product. Task ID#: 8061421

Participates as a Member of a Team (C09)

Work with staff on a seasonal grouping of photographs of fashionable styles. To perform the task, the beauty shop owner works with other staff to select the proper models, hairstyles, clothing for the season, accessories, and makeup for the grouping of photographs. This includes sharing tasks, such as obtaining clothing and furnishing makeup. The group shares ideas on how the models should look and arrives at the best decision. The beauty shop owner encourages other team members and guides them along instead of taking over tasks when new staff make mistakes. Task ID#: 8091101

Teaches Others (C10)

Perform a demonstration lesson in how to cut a certain style. To perform this task, the beauty shop owner determines the interests of other staff members in learning the style; finds time to give the demonstration; gives the lesson/training; responds to questions; and makes sure that everyone understands what is being taught. Task ID#: 8101791

Model proper techniques to a hairstylist. To perform the task, the owner recognizes a stylist having a problem with some aspect of styling hair; allows the hairstylist to observe him or her working with a client and, after a period of observation, allows the stylist to finish the styling exercise. The owner encourages the stylist while he or she works and allows the stylist to perform independently when their owner decides that the stylist is ready to do so. Task ID#: 8101361

Train a new employee. To perform the task, the beauty shop owner assesses the nature and extent of the individual's technical and personal skills; communicates to the trainee that he or she will receive constructive criticism which is not meant as a personal attack; prioritizes information to be learned; models and explains proper procedures to the trainee; and allows the trainee to practice the procedures, first with the owner and then independently. When the owner deems the trainee to be ready, the owner allows the trainee to perform work activities independently. He or she monitors the trainee's performance and provides feedback. Task ID#: 8101421

Serves Clients/Customers (C11)

Accommodate last minute regular customers when the salon is fully booked. To perform the task, the beauty shop owner receives a call from a regular customer asking for an appointment during a time in which the salon is booked. The owner books the customer for an appointment at a different time, but waitlists the customer for the original time. When a cancellation occurs, the owner contacts the customer and offers the earlier time slot. This action leaves the customer with the feeling that the salon makes every attempt to accommodate its customers. Further, hairstylists frequently work early or late to accommodate a regular customer. Task ID#: 8111361

Monitors and Corrects Performance (C16)

Deal with the implications of new fashion trends. To perform the task, the beauty shop owner recognizes the need to adopt a new technique. The owner then teaches the staff the new technique and decides how long it will take to execute the technique and how this will effect the scheduling of services and the sequencing of multiple services. The owner then thinks about the cost and time to complete the process. Task ID#: 8161101

Improves and Designs Systems (C17)

Design a system to improve employees' commissions and the shop's profit margin. To perform the task, the beauty shop owner modifies the existing system of allocating the hairstylist a 50% commission on $2,000 worth of business by offering a higher commission (55%) for hairstylists who bring in more money than the average of $2,000. Task ID#: 8171361

Change an established way of performing one aspect of the business. To perform the task, the beauty shop owner sits down with colleagues and talks about changes that are needed to improve the service and quality of work; presents image of what can be achieved by change; refines proposed change; and puts proposal into operation. Task ID#: 8171791

Selects Technology (C18)

Respond to a customer's desire for a new hair treatment. To perform this task, the beauty shop owner listens to the desires of the customer; reviews options, such as color and relaxing; determines the customer's expectations and the limits of technology; selects the appropriate product to achieve the desired result; and applies the product according to specifications. Task ID#: 8181791

Writing (F02)

Establish a network of customers by writing personal notes. To perform the task, the beauty shop owner obtains personal information from clients who enter the salon. Following appointments, the owner writes notes of appreciation to clients, expressing pleasure in meeting them and a desire to see them again. Further, the owner indexes a client's name, services, and products for future reference. Task ID#: 7021361

Listening (F05)

Tune in to the customers who ask for a drastic change in appearance in order to draw them out and get at their real, as opposed to expressed, needs. To perform the task, the beauty shop owner receives a request for services which is perceived as drastic. The owner questions the client about his or her lifestyle and listens to the responses in order to ascertain how much time the client wants to spend on daily hair maintenance. The owner also asks the client what is appealing about the requested procedure or style in order to understand the motivating force behind the request as well as its feasibility. Finally, the owner decides, from listening to the client's responses, how blunt or sensitive to be when discussing the merits of or problems associated with the chosen style. Task ID#: 7051101

Listen to a client's request for services. To perform the task, the beauty shop owner receives a telephone call from a client; listens to the information relayed concerning the desired day, time, and technician for the appointment; assesses which of these factors is most important in case the entire request cannot be accommodated; and listens to clients detail any particular problems they might be experiencing that are relevant to service. When a client arrives for a requested service, the owner displays an understanding of his or her needs in order to address the previously mentioned problems. Task ID#: 7051421

Problem Solving (F09)

Deal with clients who have damaged hair (e.g., colors they are unhappy with). To perform this task, the beauty shop owner takes extra time to listen to clients; points out the positive side of the situation in an effort to make them feel better; uses judgment and skills to suggest a solution; reaches an agreement; performs agreed upon operations; explains the reason for what was done; and follows up to make sure that the clients are satisfied. Task ID#: 7091791

Notice when income slips and does not meet expenses, and take appropriate actions. To perform the task, the beauty shop owner performs regular business practices, such as assessing employee performance relative to rate of payment. As a result of these practices, the owner notices that income is insufficient to meet expenses. The owner assesses potential reasons for the problem and generates a plausible reason for the discrepancy. (e.g., Are there too many employees for the client base? Are there not enough clients to pay the bills?) The owner takes action to deal with the situation, in this case by either making adjustments in clientele or employee number. He or she continues to monitor progress to see whether the income/expense discrepancy levels out. Finally, the owner recognizes when to solicit outside help in order to deal with a particular difficulty. Task ID#: 7091421

Seeing Things in the Mind's Eye (F10)

Visualize the finished product of a requested hairstyle in order to see if it will be flattering. To perform this task, the beauty shop owner looks at the person's face shape and body mass as well as at the requested style, and visualizes how the cut would look in relation to the customer's whole body. The owner also visualizes the shape of the style and what it would look like. Finally, the beauty shop owner visualizes how the cut would look independent of the customer and visualizes how to perform the cut in order to make the style happen. Task ID#: 7101101

Self-Esteem (F14)

Demonstrate self confidence to a customer when making styling suggestions. To perform the task, the beauty shop owner speaks with new customers and gains their confidence by asking them to discuss their hair needs. The owner positively suggests the type of change which would bring forth the desired result. These suggestions are given in a timely, confident manner which enables customers to make style decisions quickly and without agonizing. Task ID#: 7141361

Show Operations Supervisor (Based on Four Interviews)

Show operations supervisors oversee the operations of whatever show is being presented, making sure all elements of sound, lighting, and special effects operate correctly and are timed according to show specifications. This involves maintaining an intricate system of cross stage passes, hydraulic elevators, and electrical equipment that supports the operations and performance of a show, overseeing the setting up of stage sets and props, and coordinating stage crews.

Competencies		Mean	Std. Dev.
C12	Exercises Leadership	5.00	.00
C09	Participates as a Member of a Team	5.00	.00
C01	Allocates Time	4.75	.50
C04	Allocates Human Resources	4.75	.50
C06	Organizes and Maintains Information	4.50	1.00
C10	Teaches Others	4.50	1.00
C19	Applies Technology to Task	4.50	.58
C05	Acquires and Evaluates Information	4.25	.96
C08	Uses Computers to Process Information	4.25	1.50
C07	Interprets and Communicates Information	4.25	.96
C17	Improves and Designs Systems	4.25	.50
C13	Negotiates to Arrive at a Decision	4.25	.96
C11	Serves Clients/Customers	4.00	.82
C03	Allocates Material and Facility Resources	3.75	.96
C20	Maintains and Troubleshoots Technology	3.50	1.73
C14	Works with Cultural Diversity	3.00	2.00
C15	Understands Systems	3.00	1.63
C18	Selects Technology	2.75	1.71
C16	Monitors and Corrects Performance	2.75	1.71
C02	Allocates Money	2.25	.96

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F17	Integrity/Honesty	5.00	.00
F11	Knowing How to Learn	4.75	.50
F09	Problem Solving	4.75	.50
F12	Reasoning	4.50	.58
F05	Listening	4.50	.58
F01	Reading	4.25	.96
F08	Decision Making	4.25	.50
F13	Responsibility	4.25	.96
F15	Social	4.00	.82
F16	Self-Management	4.00	1.15
F07	Creative Thinking	3.75	1.50
F10	Seeing Things in the Mind's Eye	3.75	.96
F02	Writing	3.50	1.00
F06	Speaking	3.50	.58
F14	Self-Esteem	3.50	1.29
F03	Arithmetic	3.25	.96
F04	Mathematics	2.75	.96

Allocates Time (C01)

Schedule crews to deliver a complex set of lighting, sound and sets at the precise time required. To perform this task, the supervisor lists the activities required to deliver the show and allocates a specific time period for completing each activity. Then, the supervisor organizes crews to take care of the various tasks. One crew operates the stair units and one crew operates a circus wagon. Another crew operates the circular stage platforms that lift the dancers. Crews use a rehearsal to run through the routine and to correct any timing and scheduling problems. Task ID#: 8012391

Allocates Human Resources (C04)

Allocate the appropriate staffing to run the show back to back for the full cycle of shifts (with no breaks in between). To perform this task, the supervisor first analyzes the functions to be performed, including support activities such as cleaning and maintaining the show site. The supervisor meets with the foreman to determine when and how often things should be done. The staff is allocated various tasks for each shift, for example, morning and evening shifts have the responsibility for cleaning the show area. Finally, the supervisor develops responsibility statements for each of the crew members. Task ID#: 8042401

Assign the best possible staff to a show. To perform this task, the supervisor selects a skilled foreman with a lot of experience. The supervisor then works with the foreman to find experienced crew members. The supervisor analyzes the jobs and rotates crew members among the more difficult and tedious jobs to prevent burn out. Training exercises for each station are set up. The supervisor has each crew member perform the duties of a particular station for two to three days or until they master the task. The supervisor also updates the foreman's manual to include specific guidelines for handling emergency lights, sprinkler systems, new regulations and emergency exits. Task ID#: 8042411

Acquires and Evaluates Information (C05)

Present agents with a variety of options that might accommodate their technical needs. To perform this task, the supervisor figures out how to best represent the space outlay, special lift, electrical outlets and other existing infrastructure that can be used for a variety of purposes. The supervisor uses computers and computer software to develop better ways to communicate information. The supervisor evaluates the client's specifications and uses a computer program to generate "autocads" (diagrams that layout the rooms and technical facilities). The autocads allow the supervisor to quickly outline the locations of lights, amplifiers and other equipment that the client will require for the show. Task ID#: 8052391

Organizes and Maintains Information (C06)

Establish a system for tracking show attendance. To perform this task, the show operations supervisor estimates the average number of shows a guest might see, or decides that tracking attendance for each show would give management a better idea of which shows are more in demand. In that case, the supervisor takes a daily count of the number of people who attend each show, and creates a spreadsheet that tracks each show and the average attendance per show. Task ID#: 8062401

Interprets and Communicates Information (C07)

Evaluate show requirements, organize specifications, maintain the data, and generate automated representations to illustrate the proposed options. To perform this task, the supervisor coordinates the needs of the lighting designer, the manager and the road operator. The show operations supervisor analyzes the requirements and the show specifications. This involves reading specifications, and reviewing and categorizing illustrations and photographs. The supervisor then assesses the requirements and evaluates the available resources. The supervisor develops options and uses the computer to generate autocads that outline and illustrate the various treatments being proposed. The supervisor also uses the fax machine to send information to the road manager and the lighting designer. Task ID#: 8072421

Uses Computers to Process Information (C08)

Identify, invite and schedule large numbers of artists' and craftsmen's booths, and meet their set-up requirements. To perform this task, the supervisor uses a computer database to monitor a number of administrative details, such as mass mailing, maintaining a database to track payments, hotel information, booth requirements and lists of exhibits. The supervisor signs up for short term training on how to use the software. The supervisor determines the requirements and designs the database to meet those requirements. The supervisor coordinates the initial mailing to all potential participants and generates a second set of mailings to all respondents. Then, the supervisor coordinates the data entry process to track registration, specific booth requirements, hotel reservations, and payments. Task ID#: 8082411

Participates as a Member of a Team (C09)

Put together a new set for a show. To perform this task, the supervisor analyzes the tasks people are less willing to do (e.g., moving heavy equipment). The supervisor divides the team in half and alternates responsibility for undesirable tasks. The supervisor personally performs all the tasks with both crews in order to show them that none of the tasks should be considered unimportant. Task ID#: 8092401

Teaches Others (C10)

Recruit and train summer personnel. To perform this task, the supervisor secures a recruiting location, advertises a job fair, and assigns personnel to the activity. The supervisor organizes a meeting with potential hires to determine who will fit well with the work team and the work environment. At this informal meeting, the supervisor outlines how the division is structured, the supervisor's function, and staff responsibilities. The supervisor includes existing and new staff in the training effort. The supervisor coordinates training for all staff, most of which is on-the-job training. Task ID#: 8102411

Serves Clients/Customers (C11)

Discuss show requirements with the managers and agents of the show, and find creative ways of meeting a show's requirements. To perform this task, the show operations supervisor plays a support role to the manager, who is usually the primary contact for the agents. The show operations supervisor makes all the necessary arrangements to receive the agents, and prepares a list of the theater or convention floor spaces and facilities to be shown to the agents. The supervisor shows the facility to the client and meets the needs of the client to the extent possible. The supervisor calculates and contains costs while at the same time satisfying the show's specifications. The supervisor explains the technical capability of the facility so that people unfamiliar with electronics and other technical aspects can understand. The supervisor develops alternatives that have cost implications and different time requirements. Task ID#: 8112391

Negotiates to Arrive at a Decision (C13)

Negotiate with others. To perform this task, the supervisor persuades management and the client to consider other options that involve adjusting the original requirements. By suggesting several options, listening to the others' concerns, and making the necessary concessions, the supervisor successfully negotiates a solution that is acceptable to others and practical for the theater. Task ID#: 8132421

Understands Systems (C15)

Operate the scenery system. To perform this task, the supervisor carefully times each activity, allocates sufficient staff, and delineates the sequence and timing of activities. The supervisor finds the optimum organization of the tasks and assigns to each task the optimum number of crew members to make the system work smoothly. Task ID#: 8152421

Improves and Designs Systems (C17)

Change the longstanding system of fixed schedules to a flexible schedule system. The supervisor first lays out a plan for instituting the change, including the basic manpower schedule required for all shows to function. This encompasses optimum staffing resources, procedures for training foremen to operate under such a condition, and criteria for evaluating the success of the program. The supervisor first outlines the staffing schedule for every show building and designs a new schedule format for foremen to use. Each foreman is instructed to develop a weekly schedule for his/her show. The supervisor develops basic procedures and trains each foreman on how to handle decision making for scheduling purposes. The supervisor designs criteria for evaluating the new program and monitors its implementation and progress. Task ID#: 8172411

Reorganize the show operations department's supervisory structure. To perform this task, the supervisor analyzes the existing supervisory and organizational structure and notes, for example, that it is running an average of three supervisors per shift when it would be more efficient and cost effective to run only one supervisor per shift. The supervisor also notes that the overall number of supervisors can be cut and that roles and duties need clarification. The supervisor recommends reducing the hours of each supervisor as a short-term measure, and conducting personnel reviews as a long-term measure. Task ID#: 7092401

Applies Technology to Task (C19)

Learn how to use the following computer technology: D-Base, WordPerfect and Lotus 1,2,3. To perform this task, the supervisor selects software and gets sufficient training to learn how to use it. The supervisor uses the software primarily for generating management reports, tracking and monitoring show operations activities and for planning purposes. For example, the supervisor maintains records of the total number of work hours required to run the shows, total dollars spent, and total number of guests attending each show. Task ID#: 8192411

Reading (F01)

Keep up with technological advances in the industry. To perform this task, the supervisor learns about new technology primarily by reading industry journals, going to trade movies and networking with other show operators in the industry. Task ID#: 7012421

Writing (F02)

Perform administrative writing tasks. To perform this task, the supervisor writes friendly announcements and bulletins directed at the show operations staff or other personnel. The show operations supervisor also performs administrative tasks that include writing attendance records, grievance reviews, disciplinary actions and other personnel documents. The supervisor writes emergency bulletins when events warrant it, as in the case of an accident, for example, when the show operations supervisor may write a staff bulletin stating the company's position and how it affects the functioning of the department. The supervisor may also write instructions for crowd control. Task ID#: 7022411

Listening (F05)

Handle a communication problem between two groups of employees. To perform this task, the supervisor first sits down with both groups and listens to their complaints. The supervisor then investigates the grievances of both groups. The show operations supervisor attempts to get both groups to cooperate with each other. Task ID#: 7052401

Problem Solving (F09)

Reactivate the stage hydraulic elevator during a show. To perform this task, the show operations supervisor troubleshoots the equipment. The show operations supervisor runs through all the possible problems and gives instructions to the crew to correct the problem in a very short time frame. The supervisor takes a systematic approach to eliminating possibilities and uses simple common sense to make quick judgements. Task ID#: 7092391

Knowing How to Learn (F11)

Remove existing show sets and replace them with other sets, for example, the Xmas set. The show operations supervisor manages the crews and the process. The supervisor analyzes the existing blueprints of the old and new sets and studies the illustrations of the sets. The supervisor selects individuals who have experience in this task to help work out a procedure for dismantling the old set and mounting the new set. The supervisor breaks both tasks down into steps, measures the new set, and makes necessary adjustments to the original design. The supervisor then works out crew schedules to make sure that the jobs requiring more coordination are handled properly, and to ensure rotation for strenuous jobs. Task ID#: 7112401

Learn how to design a show. To perform this task, the supervisor learns about how to design and produce a show by simply doing it and relying on the knowledge and experience of the manager and some members of the crew. The supervisor also learns about what to look for in hiring performers and technical staff. Also, the show operations supervisor learns about the creative side of the business. Task ID#: 7112411

Responsibility (F13)

Implement a project that involves organizing a series of craft shows. To perform this task, the show operations supervisor designs a tracking system. The supervisor analyzes the applications to figure out what information should be part of the database. The supervisor also generates mailings to the participants. The supervisor sets up the database. Task ID#: 7132401

Put on a production in a very short time which involves crews working intensely overnight. To perform this task, the supervisor works with the crews until late at night. The supervisor does not allow any shortcuts that sacrifice quality. The manager pays attention to employees' needs and provides them with resources, extra help, and other support. The supervisor ensures that employees carry out their duties responsibly under pressure. The supervisor makes sure that all personnel pay particular attention to quality and safety. Task ID#: 7132411

Manufacturing, Agri-Business, Mining, and Construction

Excavating Equipment Operator (Based on Four Interviews)

Excavating equipment operators operate power-driven machinery to excavate or move land in preparation for road or building construction. They use machinery that raises or lowers terrain to specified grades through the use of hand and lever coordination. Excavating equipment operators push levers and depress pedals, enabling the machine to swing, dig, dump or lift.

Competencies		Mean	Std. Dev.
C19	Applies Technology to Task	4.25	.96
C10	Teaches Others	4.00	1.41
C07	Interprets and Communicates Information	4.00	1.15
C09	Participates as a Member of a Team	4.00	.82
C05	Acquires and Evaluates Information	3.75	1.50
C04	Allocates Human Resources	3.75	1.50
C03	Allocates Material and Facility Resources	3.75	1.50
C20	Maintains and Troubleshoots Technology	3.75	.96
C01	Allocates Time	3.75	.96
C16	Monitors and Corrects Performance	3.50	1.73
C18	Selects Technology	3.50	1.29
C14	Works with Cultural Diversity	3.50	1.29
C12	Exercises Leadership	3.50	1.29
C17	Improves and Designs Systems	3.25	1.50
C13	Negotiates to Arrive at a Decision	3.25	1.50
C11	Serves Clients/Customers	3.00	.82
C15	Understands Systems	3.00	1.41
C02	Allocates Money	2.75	.96
C06	Organizes and Maintains Information	2.25	.50
C08	Uses Computers to Process Information	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F17	Integrity/Honesty	5.00	.00
F10	Seeing Things in the Mind's Eye	4.75	.50
F08	Decision Making	4.75	.50
F05	Listening	4.75	.50
F06	Speaking	4.50	.58
F09	Problem Solving	4.50	.58
F12	Reasoning	4.50	.58
F14	Self-Esteem	4.25	.96
F11	Knowing How to Learn	4.25	.96
F07	Creative Thinking	4.00	.00
F16	Self-Management	3.75	1.26
F01	Reading	3.75	.50
F15	Social	3.50	1.29
F02	Writing	3.25	.50
F03	Arithmetic	3.25	.96
F04	Mathematics	3.00	.82

Job: Excavating Equipment Operator (Bulldozer)

Allocates Time (C01)

Evaluate and estimate the cycle times of equipment operation and material distribution. To perform this task, the excavating equipment operator considers how to position equipment for maximum efficiency. He or she coordinates and works cooperatively with other workers, such as hauling equipment operators, so that the project will be completed in a timely manner. Task ID#: 8012261

Allocates Material and Facility Resources (C03)

Obtain equipment parts and supplies. To perform this task, the excavating equipment operator determines the quantity and quality of parts and supplies required for each piece of equipment necessary to the project. Based on this determination and on cost and quantity available from vendors, the operator selects appropriate parts and supplies. Task ID#: 8032271

Acquires and Evaluates Information (C05)

Receive and evaluate work information from the project supervisor. To perform this task, the excavating equipment operator listens to work specification instructions; evaluates them; builds a mental model of tasks; and obtains addition training if he or she is unfamiliar with specific equipment. Task ID#: 8052251

Interprets and Communicates Information (C07)

Use verbal and non-verbal means of communication to communicate with other workers in order to promote safety and production. To perform this task, the excavating equipment operator uses hand signals to direct the positioning of hauling equipment, and uses two-way radios to communicate with other workers when line-of-sight or noise prevent verbal communication or the use of hand signals. The operator reports equipment malfunctions, orders maintenance, and reports job progress to the supervisor. Task ID#: 8072261

Participates as a Member of a Team (C09)

Coordinate a work task with other crew members to facilitate getting the job done. To perform this task, the excavating equipment operator attends crew meetings to report work progress and coordinate equipment operation. The operator critiques the work process to evaluate the best means of improving production. Task ID#: 8092261

Understand the relationship of one's equipment to that of other crew members and operate as part of a team. To perform this task, the excavating equipment operator evaluates the goals and objectives of the construction project; receives an overall briefing from the project manager; and communicates instructions to other workers during the excavation process. Task ID#: 8092271

Understands Systems (C15)

Understand the construction project goals and timetables. To perform this task, the excavating equipment operator attends the pre-job briefing, which provides a description of project objectives, conditions, and time frames. The operator understands safety considerations for the project, such as seat belt requirements (for slope work) and hard hats (when explosives are being used for blasting). Task ID#: 8152251

Applies Technology to Task (C19)

Draw on experience and training to operate equipment effectively. To perform this task, the excavating equipment operator operates a bulldozer to move dirt and materials according to construction project requirements. The individual also directs operation of other excavating and hauling equipment. Task ID#: 8192251

Set up and prepare equipment for excavation of earth. To perform this task, the excavating equipment operator plans the equipment location based on environmental conditions; determines and coordinates loading capability with hauling vehicle access; and moves the dragline and sets it up to accommodate conditions. Task ID#: 8192261

Maintains and Troubleshoots Technology (C20)

Perform preventive maintenance of equipment. To perform this task, the excavating equipment operator follows the preventive maintenance established by the manufacturer, changes oil and filters, and lubricates equipment. The operator inspects equipment daily, tightens bolts, checks drive belts and chains, inspects cables, and corrects and replaces defective parts and components. Task ID#: 8202271

Arithmetic (F03)

Estimate equipment fuel consumption. To perform this task, the excavating equipment operator estimates the amount of equipment operation time for the duration of the construction project; estimates the volume of dirt moved per hour of engine operation; and determines fuel consumption per hour of engine operation. Task ID#: 7032271

Listening (F05)

Receive and understand directions from the supervisor describing daily work objectives. To perform this task, the excavating equipment operator receives and acknowledges directions on job duties from the supervisor. The operator understands company policies regarding safety. Task ID#: 7052261

Decision Making (F08)

Resolve a problem in which safety considerations are in conflict with productivity. To perform this task, the excavating equipment operator recognizes potential safety problems and finds a way of reconciling safe equipment operation with production demands. If necessary, the operator shuts down equipment operation until safety is restored, and he/she inspects the equipment and environment to assure worker safety. Task ID#: 7082261

Determine what kind (size) of equipment to use for the project. To perform this task, the excavating equipment operator determines the distance that materials will be hauled and the hourly cost of equipment operation, based on factors such as quantity of material to be excavated, fuel consumption, and maintenance requirements. The operator evaluates the labor costs, work hours, regular time, overtime, and potential weather delays; determines the availability of skilled workers to operate specific equipment; and assigns equipment that is capable of satisfying all project requirements. Task ID#: 7082271

Seeing Things in the Mind's Eye (F10)

Foresee the final results of the dirt moving activity before actually starting to move the dirt. To perform this task, the excavating equipment operator reads blueprints or drawings, and relies on previous training and experience to mentally picture the activity and outcome. The operator evaluates safety considerations in performing the work, and observes and consults with co-workers to obtain a clear picture of the project. Task ID#: 7102251

Responsibility (F13)

Perform the assigned tasks safely and on time. To perform this task, the excavating equipment operator attends safety classes for correct equipment operation and completes an apprenticeship for equipment operation. The operator is punctual and consistent on the job and accepts responsibility for less skilled workers, such as assisting with stake layout. Task ID#: 7132251

Act responsibly in operating equipment (worth $100,000 to $5 million) safely and productively. To perform this task, the excavating equipment operator understands the cost of equipment, operates the equipment efficiently to minimize fuel and maintenance costs, and displays sensitivity to equipment limitations in order to avoid breakdowns and down time. Task ID#: 7132271

Farmer (Based on Four Interviews)

Farmers perform a variety of manual tasks designed specifically for the rearing of animals and the raising of crops. Farmers operate farm machinery to engage in planting, cultivating and harvesting (horticulture). Farmers determine crops to be grown and livestock to be reared, according to such as factors as market conditions, weather, and farm location.

Competencies		Mean	Std. Dev.
C19	Applies Technology to Task	4.00	1.41
C20	Maintains and Troubleshoots Technology	4.00	.82
C07	Interprets and Communicates Information	3.75	1.89
C09	Participates as a Member of a Team	3.50	1.73
C01	Allocates Time	3.25	.96
C10	Teaches Others	3.00	1.63
C18	Selects Technology	2.75	2.06
C02	Allocates Money	2.75	2.06
C05	Acquires and Evaluates Information	2.25	1.50
C06	Organizes and Maintains Information	2.25	1.50
C13	Negotiates to Arrive at a Decision	2.25	1.50
C04	Allocates Human Resources	2.25	1.50
C03	Allocates Material and Facility Resources	2.25	1.50
C12	Exercises Leadership	2.25	1.89
C16	Monitors and Corrects Performance	1.50	1.00
C15	Understands Systems	1.50	1.00
C14	Works with Cultural Diversity	1.50	1.00
C17	Improves and Designs Systems	1.50	1.00
C08	Uses Computers to Process Information	1.25	.50
C11	Serves Clients/Customers	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F01	Reading	4.75	.50
F13	Responsibility	4.50	.58
F11	Knowing How to Learn	4.50	.58
F08	Decision Making	4.50	1.00
F17	Integrity/Honesty	4.50	.58
F05	Listening	4.25	.96
F02	Writing	4.25	.96
F03	Arithmetic	4.00	.82
F09	Problem Solving	4.00	.82
F14	Self-Esteem	3.75	.96
F15	Social	3.75	1.50
F10	Seeing Things in the Mind's Eye	3.75	1.26
F06	Speaking	3.50	1.29
F07	Creative Thinking	3.50	1.00
F12	Reasoning	3.50	.58
F16	Self-Management	3.50	.58
F04	Mathematics	2.00	1.41

Job: Farmer

Allocates Time (C01)

Harvest crops on time. To perform the task, the farmer evaluates the maturity of a given crop and, if the crop is deemed ready for harvest, prepares equipment for use. Next, the farmer evaluates the weather and harvests the crop as quickly as possible after accounting for other priorities. Task ID#: 8011151

Participates as a Member of a Team (C09)

Handle manure (e.g., cleaning the barn and spreading manure on fields). To perform this task, one farmer sets the spreader in place (farmhand A). The other farmer, using a tractor with loader, fills the spreader (farmhand B). Then the first farmer spreads the manure on the field. Once the manure is spread, both farmers use hand scrapers and shovels to clean areas missed by the tractor. Task ID#: 8091631

Work together to store straw in a barn. To perform the task, the farmer and others work together to load the straw into wagons, transport the straw to the barn, set up the elevator and prepare the barn, unload the straw from the wagons, and stack the straw in the barn. When unloading and stacking the straw, one worker unloads the wagon and places the bales of straw into the elevator and the other worker stacks the bales in the barn. Task ID#: 8091151

Teaches Others (C10)

Teach an unknowledgeable worker the proper operation of the milk parlor. To perform the task, the farmer demonstrates to the workers how to properly operate a milking machine, dispense medicine, move cows from a holding pen to a milk parlor, and properly mix the bottle milk fed to newborn calves. Task ID#: 8101191

Understands Systems (C15)

Control the quality of generated milk. To perform the task, the farmer reads and interprets the co-op test report on the quality of the milk. The farmer then tests individual cows and medicates those that require medication. Finally, medicated cows are isolated from the milking herd to ensure the continued high quality of the milk. Task ID#: 8151151

Selects Technology (C18)

Identify and correct a problem with a piece of equipment. To perform the task, the farmer perceives a problem with a mower. The farmer selects the appropriate equipment to correct the problem and modifies the idler pulley on the mower conditioner. Task ID#: 8181121

Choose an appropriate hay baler based upon certain contingencies. To perform the task, the farmer evaluates market information and the labor expenditures which are required for each given hay baler. Further, the farmer evaluates the farm's feeding and storage facilities and, finally, makes a choice based upon these evaluations. Task ID#: 8181151

Maintains and Troubleshoots Technology (C20)

Repair silage mixers. To perform this task, the farmer defines the symptom, isolates the fault, removes/replaces the broken part, aligns and adjusts as necessary, and performs operational checks. Task ID#: 8201631

Arithmetic (F03)

Keep track of medicine and feed. To perform the task, the farmer keeps track of quantity of medicines dispensed and pounds of feed distributed to cattle. Task ID#: 7031191

Mix feed in correct rations. To perform this task, the farmer adds corn, silage and minerals in the mixer in correct proportions. The farmer then sets the mixer according to the rations and operates the mixer. Task ID#: 7031631

Listening (F05)

Follow various milking instructions. To perform the task, the farmer listens to instructions concerning which cows to milk and when to milk them. The farmer also listens to instructions concerning which cows to treat with medicine. Finally, the farmer listens to the sounds of the milking machines to ensure that they are in proper operating order. Task ID#: 7051151

Creative Thinking (F07)

Transform ideas and requirements into actual products. To perform the task, the farmer recognizes the need to design a cattle rack. The farmer views a factory unit in order to facilitate the design of the rack. He/she then designs the unit, welds and cuts parts to create the final product. Task ID#: 7071121

Decision Making (F08)

Determine the correct time to plant and harvest crops. To perform the task, the farmer monitors weather reports to determine when will be the ideal time to plant and harvest crops. The farmer makes decisions about what crops to plant based upon needs and market requirements. Task ID#: 7081191

Problem Solving (F09)

Consider how to deal with a drought. To perform the task, the farmer evaluates the impact of the drought on farming operations. Further, the farmer considers the amount and type of resources on hand, especially cattle feed; checks the toxicity of on-hand resources; and compares the number of animals to be fed with the amount of existing resources. The farmer then locates and prices additional feed, as needed, and decides whether to purchase additional feed or sell cows. Task ID#: 7091151

Responsibility (F13)

Milk cows. To perform this task, the farmer bring cows to a barn early in the morning, sets up milking equipment, and ensures proper operation. The farmer then brings the first cows into the milking parlor and milks them by attaching milkers. The cows are treated medically, as necessary. Task ID#: 7131631

Take responsibility for accomplishing work assignments. To perform the task, the farmer ensures that work assignments are accomplished correctly and on time, such as by ensuring that the cattle count is correct. Task ID#: 7131191

Properly feed and water calves. To perform the task, the farmer checks the feed and water and instructs a farm worker to feed the calves. The farmer must account for all animals in this process and then follow up on the instructions by rechecking the feed and water. Task ID#: 7171151

Carpenter (Based on Three Interviews)

Carpenters construct, erect, and prepare layouts in order to repair structures or fixtures of wood according to clearly defined building codes. They utilize hand tools and power tools. Carpenters study blueprints or building plans for information pertaining to needed materials.

Competencies		Mean	Std. Dev.
C18	Selects Technology	4.67	.58
C09	Participates as a Member of a Team	4.33	.58
C15	Understands Systems	4.00	.00
C19	Applies Technology to Task	3.67	.58
C10	Teaches Others	3.33	1.15
C07	Interprets and Communicates Information	3.33	2.08
C11	Serves Clients/Customers	3.00	2.00
C12	Exercises Leadership	3.00	1.73
C01	Allocates Time	3.00	1.73
C16	Monitors and Corrects Performance	3.00	1.00
C14	Works with Cultural Diversity	3.00	1.00
C05	Acquires and Evaluates Information	2.67	1.53
C20	Maintains and Troubleshoots Technology	2.67	1.53
C13	Negotiates to Arrive at a Decision	2.67	1.53
C17	Improves and Designs Systems	2.67	1.53
C03	Allocates Material and Facility Resources	2.33	1.15
C04	Allocates Human Resources	2.33	1.15
C02	Allocates Money	2.33	1.15
C06	Organizes and Maintains Information	2.00	1.73
C08	Uses Computers to Process Information	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F03	Arithmetic	5.00	.00
F05	Listening	4.33	.58
F04	Mathematics	4.33	1.15
F01	Reading	4.33	1.15
F17	Integrity/Honesty	4.33	1.15
F10	Seeing Things in the Mind's Eye	4.00	1.00
F08	Decision Making	3.67	1.53
F06	Speaking	3.67	.58
F12	Reasoning	3.67	.58
F11	Knowing How to Learn	3.67	.58
F14	Self-Esteem	3.33	.58
F09	Problem Solving	3.00	.00
F16	Self-Management	3.00	1.00
F15	Social	3.00	1.00
F02	Writing	2.67	1.15
F07	Creative Thinking	2.33	.58

Job: Carpenter

Allocates Time (C01)

Receive a projection of time allowed for the completion of a project and set intermediate goals. To perform this task, the carpenter discusses the project with the work crew to confirm the completion date; determines priorities of the work to be accomplished; and sets intermediate goals. Task ID#: 8012081

Prioritize work activities. To perform the task, the carpenter prioritizes work activities in order to first complete those jobs which lay the groundwork for future activities. In-house repair, for instance, the carpenter would repair broken windows or doors first to ensure that additional damage does not occur. Task ID#: 8011301

Acquires and Evaluates Information (C05)

Gather the information needed to commence repairs. To perform the task, the carpenter responds to a repair call from a customer by determining the nature of the problem from the customer and investigating the problem further to gather supplementary data, as needed. Task ID#: 8051301

Interprets and Communicates Information (C07)

Study data on blueprints, evaluate relevancy and accuracy of dimensions, and convert information to project development. To perform this task, the carpenter studies blueprint details; evaluates the feasibility of the project; extracts information from the blueprints and checks for accuracy; and exchanges information with the building contractor on anything not completely understood. Task ID#: 8072081

Participates as a Member of a Team (C09)

Share experiences and knowledge with other workers, and work in cooperation with other workers on a variety of tasks to accomplish project goals. To perform this task, the carpenter reviews the blueprints and project plans with other workers before the project begins, to understand what the project goals are and what each worker is expected to accomplish; listens to other team members and responds to their concerns; and works with others to accomplish tasks where several people are required, such as putting up trusses or beams. Task ID#: 8092081

Teaches Others (C10)

Teach an apprentice how to perform necessary tasks. To build footer and wall forms, for example, the carpenter explains and shows to the apprentice each step of the process, including why the step is necessary, the importance of accuracy, and the consequences of mistakes; shows the apprentice how to do the job using the proper tools; lets the apprentice do the task and observes his or her performance; and corrects mistakes and improper handling of tools. Task ID#: 8101751

Serves Clients/Customers (C11)

Resolve customers' problems in a satisfactory manner. To perform the task, the carpenter investigates the identified problem and performs any necessary repairs. The carpenter follows up with the customer to ensure that the repairs are satisfactory. Task ID#: 8111301

Understands Systems (C15)

Learn how a technological system (blueprint of finished product) works and operate effectively within the system to complete the project. To perform this task, the carpenter asks questions of the building contractor and other workers to learn as much as possible about the project at hand, and studies reference materials that describe how carpentry tasks are accomplished. Task ID#: 8152081

Know the construction site setup, the jobs that must be completed first, and the craftworker responsible for doing the job. To build wood or metal wall forms for concrete, for example, the carpenter begins by studying the dimensions and shapes on drawings, the length of reinforcing rods to be installed by ironworkers, and the rate of pour of concrete by cement workers; and builds ramps and runways of the strength required for use by other workers in performing their jobs. Task ID#: 8151751

Selects Technology (C18)

Select the appropriate technology to run air-powered tools. To perform the task, the carpenter compares compressors for their potential use in running air-powered portable tools. The carpenter may select the new portable compressor over the heavier conventional models for this purpose. Task ID#: 8181301

Reading (F01)

Study blueprint specifications, instrument measurements, and other documents. To perform this task, the carpenter looks at blueprint specifications to determine assignments; studies the blueprint narrative to establish procedures required; reads building codes to understand building limitations; extracts readings from rulers, tape measures, and other instruments to determine size dimensions of wooden material; reads machine or tool instructions on proper operation of equipment; and observes instructions left by the construction supervisor, general contractor, or homeowner. Task ID#: 7012081

Arithmetic (F03)

Build framework for a building to be constructed. To perform this task, the carpenter checks foundation for "truth" of elevation, squareness, dimension, and line; measures off length of board to be used; lays out plywood to obtain correct measurement; cuts board to precise measurement; fits board in to specified position and nails in place. Task ID#: 7031751

Listening (F05)

Listen to the verbal instructions given by the construction supervisor to build a door jamb of specified measurements. To perform this task, the carpenter measures material slightly above measurements specified to allow for hinges; marks measurements and cuts lumber to specifications; sets door jamb into place; and nails it into position. Task ID#: 7051751

Seeing Things in the Mind's Eye (F10)

Visualize a three-dimensional building or structure from a one-dimensional blueprint. To perform this task, the carpenter studies the blueprint of the project structure; looks over the structure's building site; determines how the completed structure will appear on site; visualizes the materials needed for finishing the project or the part of the project that has been assigned; and decides what tools will be needed to begin and complete the project. Task ID#: 7102081

Knowing How to Learn (F11)

Update skills. To perform the task, the carpenter learns new carpentry methods, such as by reading new product literature. Task ID#: 7111301

Responsibility (F13)

Inspect forms during pouring of concrete and perform any necessary tightening, bracing, or realigning. To perform this task, the carpenter attaches a string to the inside of the form from one end to the other end; inserts gauge between string and form at various intervals during pouring of concrete to measure height of wall; turns braces to suck form in or let form out whenever wall is not straight; and examines bolts to ensure that they are spaced in the wall at proper intervals. Task ID#: 7131751

Fulfill building commitments on time and at contracted expenses. To perform this task, the carpenter reviews the building plans (before starting) with the contractor and determines the accuracy of the original contract date and cost; keeps the contractor informed about any changes in time or expenses with the project; sets personal daily, weekly, or other short-term goals, and helps other workers to do the same to reach the overall project goals; and works extra hours, as needed, to meet these goals. Task ID#: 7132081

Integrity/Honesty (F17)

Care for and return tools left by another worker at the work site when the shift is over. To perform this task, the carpenter inquires of workers still at the job site if they left any tools or know to whom the tools belong; locks tools up for safekeeping or keeps them if there is no safe place to store them until the next work day; notifies construction supervisor where tools are stored; and returns tools to their owner when he or she is located. Task ID#: 7171751

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Construction Contractor (Based on Four Interviews)

Construction contractors agree to perform specified construction work in accordance with an architect's plans, blueprints, codes, and other specifications. They estimate the cost of materials, labor, and use of the equipment required to fulfill the provisions of the contract; prepare bids; and confer with clients to negotiate the terms of a contract.

Competencies		Mean	Std. Dev.
C12	Exercises Leadership	5.00	.00
C04	Allocates Human Resources	5.00	.00
C08	Uses Computers to Process Information	4.75	.50
C11	Serves Clients/Customers	4.75	.50
C03	Allocates Material and Facility Resources	4.75	.50
C02	Allocates Money	4.75	.50
C18	Selects Technology	4.75	.50
C19	Applies Technology to Task	4.75	.50
C01	Allocates Time	4.50	.58
C16	Monitors and Corrects Performance	4.50	.58
C06	Organizes and Maintains Information	4.25	.96
C09	Participates as a Member of a Team	4.25	1.50
C15	Understands Systems	4.25	.50
C17	Improves and Designs Systems	4.00	.82
C10	Teaches Others	3.75	1.50
C07	Interprets and Communicates Information	3.75	.96
C14	Works with Cultural Diversity	3.75	.96
C13	Negotiates to Arrive at a Decision	3.50	1.00
C20	Maintains and Troubleshoots Technology	3.50	1.29
C05	Acquires and Evaluates Information	3.50	1.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	4.75	.50
F08	Decision Making	4.75	.50
F03	Arithmetic	4.75	.50
F01	Reading	4.75	.50
F17	Integrity/Honesty	4.75	.50
F10	Seeing Things in the Mind's Eye	4.50	1.00
F04	Mathematics	4.50	1.00
F09	Problem Solving	4.50	.58
F16	Self-Management	4.50	.58
F02	Writing	4.00	.82
F05	Listening	4.00	.82
F07	Creative Thinking	4.00	.82
F14	Self-Esteem	4.00	.82
F15	Social	3.75	.96
F12	Reasoning	3.75	.50
F11	Knowing How to Learn	3.75	1.26
F06	Speaking	3.50	1.29

Job: Construction Contractor

Allocates Time (C01)

Establish priorities among the various tasks that must be performed. To perform this task, the contractor determines the tasks to be accomplished within time frames using a job progress schedule; establishes time parameters for the construction tasks; coordinates tasks and times to ensure performance of dependent tasks; and maintains a critical path diagram to organize the sequence of construction tasks mandatory for continuing progress of the project. The contractor plans, visualizes, and anticipates future needs. Task ID#: 7082211

Allocates Money (C02)

Ensure that the construction project is completed within the estimated budget. To perform this task, the contractor determines the project costs based on contract requirements; calculates the work to be performed; breaks out each element of cost (technology, equipment, materials, personnel); and assigns each element a unit estimated cost. Monitoring the results on a timely basis, the contractor analyzes the results to project future unit costs. Task ID#: 8022231

Prepare a cash flow forecast for company operations. To perform this task, the contractor identifies company income and expenses; analyzes and inventories company income and expenses (cash flow); projects changes in cash flow; and adjusts company operations consistent with those changes. Task ID#: 8022221

Allocates Material and Facility Resources (C03)

Allocate and deploy equipment for a construction project. To perform this task, the contractor recognizes the importance of project planning; plans the equipment allocation; establishes a construction schedule and timetable; coordinates equipment resources with the schedule; and obtains or purchases appropriate equipment for the project. The contractor implements, monitors, and improves the equipment allocation plan on a periodic basis. Task ID#: 8032241

Allocates Human Resources (C04)

Delegate responsibility to staff. To perform this task, the contractor reviews the qualifications of available personnel, selects and assigns staff to job responsibilities, and provides the necessary resources to allow staff to perform tasks. Monitoring and evaluating workers' performance, the contractor provides guidance, provides feedback to improve worker performance, and, where appropriate, provides workers with training and education. Task ID#: 8042211

Organizes and Maintains Information (C06)

Organize and maintain the information needed to administer a construction project. To perform this task, the contractor plans the kinds of information required to administer and track construction project costs, materials, equipment, and time. Breaking down information categories into basic elements, the contractor coordinates the elements with the overall project. The individual develops a record maintenance system to capture and retain the information, and constantly updates the information as it is collected. Task ID#: 8062241

Interprets and Communicates Information (C07)

Interpret and communicate information, such as the contents of the U.S. Army Corps of Engineers safety programs. To perform this task, the contractor recognizes that the Corps of Engineers industrial safety requirements are more stringent than the Department of Labor's Occupational Safety and Health Administration (OSHA) worker safety requirements. To assure that tools and equipment conform to the higher safety standards, such as heavy equipment rollover protection, the contractor communicates the safety requirements to all project personnel and monitors and enforces worker safety requirements. Task ID#: 8072231

Uses Computers to Process Information (C08)

Prepare a project estimate, a construction schedule, materials requisitions, and job status and progress reports. To perform this task, the contractor turns on the computer and selects appropriate automated data processing (ADP) software. The contractor acquires the appropriate support data and enters it into the programs, makes decisions and inputs the results, interprets data results, and makes changes to improve performance. Task ID#: 8082211

Prepare a job cost report. To perform this task, the contractor receives information from field personnel, enters the cost information in the computer, obtains the final report, and prints out a hard copy. Task ID#: 8082221

Serves Clients/Customers (C11)

Recognize and respond to the additional expectations of clients by using new techniques and technologies that address resource recycling and environmental concerns. To perform this task, the contractor identifies the pavement scarification (road resurfacing) market, using a roto-milling method in which existing asphalt is removed, recycled, and reapplied as a new road surface. By communicating the advantages and costs of the roto-milling technology, the contractor develops new markets for it. To provide the most cost-efficient construction services to clients, the contractor maintains and provides an inventory of modern and efficient technological equipment and maximizes utilization of this equipment. The contractor is accessible and available for client service. Task ID#: 8112231

Ensure client satisfaction by providing the agreed upon services and products. To perform this task, the contractor recognizes the importance of client satisfaction, identifies client needs, negotiates options with the client, and recommends solutions to address client needs. The contractor gets the staff to accept the client satisfaction plan, continually evaluates and adjusts performance to provide optimal client service, and ensures that the agreed upon services and products are provided. Task ID#: 8112241

Serve customers in a way that satisfies them and allows the contractor to remain in business. To perform this task, the contractor identifies the client's needs both formally and through informal means and determines the relative priority that the client places on project elements, including time, quantity, and quality (e.g., some customers want the highest quality regardless of cost, while some require only functional quality); convinces clients that he/she is striving to meet their needs, shares responsibilities and frustrations with project progress; and ensures that client needs are met. Task ID#: 8112211

Exercises Leadership (C12)

Direct sub-contractors and employees to complete the project. To perform this task, the contractor recognizes the assigned tasks and the current status of the project, evaluates the talents and traits of the personnel available to perform project tasks, and develops a strategy to make the best use of the talents and traits of personnel to move the project to completion. The contractor implements the strategy, communicates it to the appropriate personnel, evaluates progress, and adjusts the strategy based on performance. Task ID#: 8122221

Monitors and Corrects Performance (C16)

Monitor field staff productivity. To perform this task, the contractor obtains cost reports that represent the labor and material expenses and compares actual project costs to date with estimated unit costs. Determining the adjustments necessary to correct or change current performance which deviates from estimated costs, the contractor implements changes to improve productivity. Task ID#: 8162221

Monitor equipment maintenance (internal and external) and optimize cost effectiveness against each option. To perform this task, the contractor assesses budget expense against actual expenses; assesses equipment utilization versus down time (non-operational status); and decides if estimated and actual costs are within expectations. Based on all of this information, the contractor chooses an appropriate option for equipment maintenance. Task ID#: 8162231

Improve productivity by monitoring and correcting the performance of construction functions. To perform this task, the contractor identifies the need to monitor and correct performance; designs an overall plan to do so; and breaks down the job into monitoring elements; correlates the unit elements with the overall project plan (assigning cost codes) and summarizes job costs with a job element breakdown; monitors performance with planned construction objectives; identifies unacceptable variances, attempts corrective action, and continues to monitor. Task ID#: 8162241

Selects Technology (C18)

Identify the appropriate technology for use in a construction project. To perform this task, the contractor reviews and analyzes the project to be constructed and breaks it down into basic elements, i.e., site preparation, concrete masonry, structural, electrical, and mechanical. The contractor identifies the critical elements of each process, such as the way to move dirt at the construction site; reviews historical alternatives of using different technologies; and selects the best alternative. Having obtained staff commitment to use selected technology to obtain the desired objective, the contractor mobilizes the technology utilization plan. Task ID#: 8182241

Select automated data processing (ADP) hardware and software to track construction project activities. To perform this task, the contractor identifies the appropriate hardware and software for the purpose of monitoring project activities; identifies ways and means to collect information; collects the information; and puts in the data. The contractor analyzes and evaluates the statistical results of data collection. Task ID#: 8182211

Obtain the necessary equipment to complete a construction project successfully. To perform this task, the contractor evaluates the equipment requirements for the project; determines the physical and environmental conditions that impact on equipment selection; compares the requirements with prevailing site conditions; and makes a selection of equipment. Task ID#: 8182221

Applies Technology to Task (C19)

Repair concrete bridge decks by overlaying them with concrete while allowing vehicle traffic access. To perform this task, the contractor prepares an estimate of the work to be performed; communicates a schedule of operations to project personnel; and implements the schedule while accommodating vehicular traffic with a section-by-section, step-by-step process. The contractor coordinates the bridge overlayment technology with personnel, equipment, and material resources to produce the finished product, and carefully monitors project progress. Task ID#: 8192231

Reading (F01)

Read specifications, drawings, soil reports, and other written materials in order to understand the scope of work for a construction project. To perform this task, the contractor scans every page of the drawings; reads the special conditions of the specifications and the invitation to bid; performs a quantity analysis of the drawings; and reads each relevant section. The contractor also reads sub-contractors' proposals and compares their scopes of work with the invitation to bid and specifications. Task ID#: 7012211

Writing (F02)

Prepare a letter to a sub-contractor delineating responsibilities for completion of a construction earth grading contract. To perform this task, the contractor, having awarded a sub-contract to a successful bidder to perform earth grading work, assesses the sub-contractor's performance and work progress. On determining that the sub-contractor is not satisfying compaction specifications, the contractor gives a verbal notification of the discrepancies. If the contractor assesses work progress and continues to find progress unsatisfactory, he/she writes a letter to the sub-contractor specifying contract requirements and the penalties for non-performance. Task ID#: 7022231

Arithmetic (F03)

Provide cost estimates of work tasks. To perform this task, the contractor ascertains the parameters of the job and enumerates the tasks to be performed in a detailed breakdown of time, material, and personnel. The contractor quantifies the work items; obtains the costs of materials and equipment required for the project; and calculates the unit costs to arrive at the total project cost. Task ID#: 7032221

Problem Solving (F09)

Analyze and correct the problem when timber piles break before reaching the specified bearing. To perform this task, the contractor evaluates and selects the appropriate equipment to accomplish the project and chooses the right kind of timber pilings based on the strength, size (diameter), and cost to meet project specifications. When timbers break during the piling operation, the contractor analyzes how and why this is occurring and reassesses the strength of the materials, the equipment specifications, and the personnel skills. Determining the cause of failure, the contractor chooses the most economical way to correct the problem. Task ID#: 7092231

Resolve a problem in which small tools are disappearing on a project involving many employees. To perform this task, the contractor, recognizing that small tools (both hand and power) are missing, makes a site visit to determine the conditions and possible causes of the tool losses. The contractor discusses corrective measures with all personnel involved in the project and designs and implements inventory control procedures. Reassessing the tool loss problem, the contractor determines if the inventory control solution has created any new problems, such as reduced productivity. Task ID#: 7132231

Seeing Things in the Mind's Eye (F10)

Visualize the final construction project from a preliminary outline. To perform this task, the contractor obtains and evaluates the description of the project verbally or in a rough draft. Mentally, the contractor organizes the elements of the project (e.g., height, weight, strength, durability); constructs and combines the elements in a time sequence for the finished job; and reviews all the elements for construction feasibility. Task ID#: 7102221

Knowing How to Learn (F11)

Learn and strive to improve performance and quality. To perform this task, the contractor recognizes and analyzes deficiencies in the construction process and workforce performance, and makes a commitment to change things that need changing. Remaining open-minded and exploring alternatives to improve performance, the contractor seeks relevant information from other sources, correlates and integrates the information and options into strategies to improve performance, and implements the changes. Task ID#: 7112241

Responsibility (F13)

Satisfy the project's contract requirements. To perform this task, the contractor familiarizes himself/herself with the contract requirements; organizes the personnel, material, and equipment required to satisfy the contract; and coordinates and schedules the personnel, material, and equipment to project completion. The contractor monitors the progress of work to completion and verifies that project specifications are being met. Task ID#: 7132221

Self-Management (F16)

Manage a construction project. To perform this task the contractor plans and organizes the step-by-step progress of the project; communicates to relevant personnel the project goals, expectations, and ways and means to accomplish the project; and holds periodic progress meetings of key personnel. Task ID#: 7162211

Expeditor/Purchasing Agent (Based on Four Interviews)

Purchasing agents purchase the goods, materials, supplies, and services required by their organizations. They ensure that products are of suitable quality and are available when needed. Purchasing agents review requisitions and interview vendors to obtain the information needed to select purchase items. They contact vendors and shippers to verify shipment of goods on a given date.

Competencies		Mean	Std. Dev.
C01	Allocates Time	4.50	.58
C15	Understands Systems	4.25	.96
C06	Organizes and Maintains Information	4.25	.96
C13	Negotiates to Arrive at a Decision	4.25	.50
C08	Uses Computers to Process Information	4.00	2.00
C05	Acquires and Evaluates Information	4.00	.82
C11	Serves Clients/Customers	3.75	1.26
C09	Participates as a Member of a Team	3.75	1.26
C12	Exercises Leadership	3.75	.50
C14	Works with Cultural Diversity	3.50	1.73
C07	Interprets and Communicates Information	3.25	1.26
C02	Allocates Money	3.25	1.50
C10	Teaches Others	3.25	1.50
C17	Improves and Designs Systems	3.25	.96
C16	Monitors and Corrects Performance	3.00	.00
C04	Allocates Human Resources	3.00	1.41
C03	Allocates Material and Facility Resources	2.50	1.91
C19	Applies Technology to Task	2.00	.82
C20	Maintains and Troubleshoots Technology	1.75	1.50
C18	Selects Technology	1.50	.58

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	5.00	.00
F17	Integrity/Honesty	5.00	.00
F03	Arithmetic	4.50	1.00
F06	Speaking	4.50	.58
F02	Writing	4.50	1.00
F09	Problem Solving	4.50	.58
F16	Self-Management	4.50	.58
F15	Social	4.00	1.15
F12	Reasoning	4.00	1.15
F13	Responsibility	4.00	.82
F01	Reading	4.00	1.41
F08	Decision Making	4.00	.82
F14	Self-Esteem	3.75	.96
F11	Knowing How to Learn	3.75	1.26
F04	Mathematics	3.50	1.00
F07	Creative Thinking	3.00	.82
F10	Seeing Things in the Mind's Eye	2.75	1.26

Job: Expeditor/Purchasing Agent

Allocates Time (C01)

Prioritize assignments that must be completed during the day and make sure time is not wasted repeating activities. To perform this task, the expeditor/purchasing agent reviews the mail in the in-basket; accesses the computer to retrieve requisitions and memoranda for action; takes supplier and department telephone calls for assistance; determines the most important quotes and works on the quotes with the most critical dates first; and solves problems of telephone callers to their satisfaction without letting the calls interfere with the timely completion of assignments. Task ID#: 8011681

Allocates Money (C02)

Negotiate contracts within budgetary limits. To perform this task, the expeditor/ purchasing agent receives and reviews a buying budget; consults with the merchandise manager to discuss the budget and the goods to be purchased; analyzes sales records to identify goods in demand; interviews and negotiates terms with vendors; selects and orders merchandise based on market trends, customer tastes and buying habits, current inventory levels, and price and delivery arrangements of vendors; and maintains records on goods purchased, costs, inventories, and product performance. Task ID#: 8021901

Acquires and Evaluates Information (C05)

Interview vendors and evaluate company sales data to determine purchase requirements. To perform this task, the expeditor/purchasing agent reviews and analyzes sales records to identify goods in demand; interviews and negotiates terms with vendors; evaluates information obtained; and selects and orders merchandise based on conclusions drawn from that evaluation. Task ID#: 8051901

Interprets and Communicates Information (C07)

Make presentations and generate reports to management regarding such topics as status of work activities and an analysis of leasing versus purchasing options. To perform the task, the expeditor researches a project topic, gathers pertinent data in order to have a comprehensive understanding of the material, and organizes the obtained data in order to resolve the problem. The expeditor then assimilates information for the presentation in a clear and concise manner, including summarizing technical information as issues for management/business levels. Next, the expeditor writes a report of the topic, organizing ideas in a logical and understandable manner. Finally, he or she gives an oral presentation of the materials, effectively using visual aids and graphics when appropriate, and responds to questions. Task ID#: 8071261

Uses Computers to Process Information (C08)

Access the computer to retrieve required forms used to request bids and to place purchase orders. To perform this task, the expeditor/purchasing agent inputs the code to access the personal account file in order to determine bid requests that need to be completed; checks the file listing to determine who the qualified suppliers are; checks quotes in the computer and retrieves data on potential suppliers; retrieves the purchase order form and issues the purchase order; and enters appropriate codes and special conditions into the computer according to the prearranged format. Task ID#: 8081681

Use the computer to obtain monthly and yearly inventory usage rates. To perform this task, the expeditor/purchasing agent keys in specified commands to bring up the computer system; picks "stock status" from menu; observes the screen; writes down inventory problems; and deals with these problems accordingly. Task ID#: 8082111

Participates as a Member of a Team (C09)

Work with other buyers to achieve the goals/objectives of the department. To perform this task, the expeditor/purchasing agent learns/knows the duties and responsibilities of buyer; attends staff meetings to learn/discuss department goals/objectives; and receives and performs individual assignments from a supervisor to contribute to the achievement of department goals. Task ID#: 8091901

Teaches Others (C10)

Answer workers' questions about a product system. To perform this task, the expeditor/purchasing agent talks to a vendor to obtain information; sets up a meeting with the inquiring worker(s); and answers the question(s). Task ID#: 8102111

Serves Clients/Customers (C11)

Ensure that customers receive the products they need in a timely manner and at the best price possible. To perform the task, the expeditor listens to customers in order to understand their needs or to resolve problems and complaints. He or she responds to the customer's needs in a timely manner and obtains customer feedback to ensure that the customer is satisfied. Task ID#: 8111261

Negotiates to Arrive at a Decision (C13)

Resolve an issue between the company and the supplier so that both parties are satisfied with the decision. To perform this task, the expeditor/purchasing agent listens to a supplier who insists that the blueprints submitted by the company are in error and that the part cannot be made to strength using the blueprints submitted; looks at the blueprints showing how the part is to be built to ascertain where the supplier is having problems and how to explain to the departments involved what and where the specific problem is; contacts manufacturing and engineering departments, who are insistent in their views regarding the blueprints and the part; informs them of the problem that the supplier is having adhering to the blueprint specifications and why; listens to both sides of the issue; gets both parties to listen to the other's viewpoint; and then negotiating with both parties to come up with suggested changes (i.e. change blueprint) that both sides can agree upon without altering the product. Task ID#: 8131681

Negotiate with vendors to obtain the best merchandise available at the lowest possible cost. To perform this task, the expeditor/purchasing agent compiles and analyzes industry sales data to identify goods in demand; selects vendors to interview based on that information; interviews vendors to learn about products, prices, and their ability to meet the needs of the company; and negotiates with vendors to obtain contract terms that best meet these needs. Task ID#: 8131901

Understands Systems (C15)

Know departments and how they interact with each other, who to contact in each department, and what each person can and cannot do for you in order to eliminate wasting time by contacting the wrong person. To perform this task, the expeditor/purchasing agent acts as the contact person for the supplier and the departments within the company when problems arise regarding the making of a part; contacts the engineering department when the supplier calls and states there is a problem with the blueprints; contacts the materials and processing department when the supplier has a metallurgical problem with a part; contacts the quality control department if there is a problem with the quality of the part; ascertains from the proper department whether the part needs to be made as stringently as originally specified. Task ID#: 8151681

Maintain an awareness of the resources that supply information needed to resolve problems within organization's guidelines. To perform the task, the expeditor seeks assistance and guidance from knowledgeable resources within the organization when needed. He or she also understands the organization's policies and procedures for handling various issues. The expeditor requests clarification, asks questions when necessary, and keeps others informed of relevant matters. Task ID#: 8151261

Improves and Designs Systems (C17)

Effect a change in department policy that benefits the company as a whole. To perform this task, the expeditor/purchasing agent recognizes a deficiency in department policy that limits buyer options and inhibits performance/productivity; meets with a supervisor to express concerns and recommend solutions; prepares a written version of his or her concerns and recommendations for submission to upper management by the supervisor;

attends meeting with the supervisor and upper management to discuss the possible policy change. Task ID#: 8171901

Applies Technology to Task (C19)

Use the computer to obtain monthly and yearly inventory information. To perform this task, the expeditor/purchasing agent keys in specified commands to bring up the computer system; picks "stock status" from menu; observes the screen; writes down inventory problems; and deals with these problems accordingly. Task ID#: 8192111

Writing (F02)

Write concise and accurate purchase orders so they can be understood by a layperson. To perform this task, the expeditor/purchasing agent completes and sends out a request for quotes for a part to be manufactured; writes a memorandum to management describing what was done, including suppliers contacted and why, how a supplier's price was evaluated, and whether the price is a good price and why; fills out various forms and documents used to obtain the approval of upper management; and writes a memorandum stating whether supplier has complied with government requirements and how the procurement meets government regulation. Task ID#: 7021681

Write management status reports. To perform the task, the expeditor writes reports clearly and concisely, demonstrating the appropriate use of grammar and syntax and using correct spelling. Task ID#: 7021261

Listening (F05)

Interview vendors to learn about their products and services. To perform this task, the expeditor/purchasing agent receives a request from a vendor for a meeting to discuss his or her product line; schedules and notifies the vendor of the meeting; greets the vendor upon arrival; listens to the vendor's presentation; explains the product and service needs of the organization to the vendor; listens to the vendor's explanation of the product's/service's ability to meet the needs of the organization; evaluates the information obtained from the vendor; and asks the vendor to prepare and submit a proposal based on this information. Task ID#: 7051901

Be attentive to the supply-related needs of one's organization. To perform this task, the expeditor/ purchasing agent negotiates with the vendor for a product; briefs the department on the progress of the negotiations; negotiates prices with vendors; discusses price negotiations with supervisors; obtains approval; and purchases the product. Task ID#: 7052111

Speaking (F06)

Make presentations to large and varied groups (such as users, department heads). To perform the task, the expeditor outlines the information to be presented, organizing ideas in a logical and understandable manner. The expeditor makes visual aids, practices the presentation, ensures that the material is relevant to the audience, and tailors the delivery to the audience, as needed. Finally, the expeditor makes the presentation and responds to questions. Task ID#: 7061261

Decision Making (F08)

Decide what supplier to use during a bid evaluation based on the supplier information stored in the computer. To perform this task, the expeditor/purchasing agent retrieves information stored in the computer regarding suppliers that have placed a bid; looks at their past performance; and determines which supplier makes the most reliable part at the best price. Task ID#: 7081681

Problem Solving (F09)

Deplete the stock of slow-selling merchandise. To perform this task, the expeditor/purchasing agent reviews sales and inventory reports to identify slow-selling merchandise; contacts the vendor to negotiate options available, such as buy-back; consults with store management to discuss possible methods of moving specified merchandise, such as price reductions; establishes a markdown policy for specified merchandise; and monitors sales of merchandise weekly. Task ID#: 7091901

Resolve shipping problems by interceding between the vendor and the client. To perform the task, the expeditor obtains information from both the vendor and the client about the perceived problem. Based upon this information, the expeditor analyzes the problem to determine responsibility and possible solutions. He or she formulates a solution to the problem which is based upon company policy and the specific circumstances. The expeditor strives to promote a "win-win" environment and solutions should reflect this philosophy. Task ID#: 7091261

Responsibility (F13)

Review all work thoroughly when soliciting bids, evaluating suppliers, and writing purchase orders so that everything is of high standards and contains no mistakes that will cause a disaster later. To perform this task, the expeditor/purchasing agent writes the purchase order to conform to rules and regulations and, using reference manuals, rechecks it to make sure nothing has been omitted. Once the purchase order is placed, the expeditor/purchasing agent checks to see that the parts are being made according to the blueprint and telephones supplier periodically to make sure that the person responsible for keeping things on schedule is doing so. Task ID#: 7131681

Integrity/Honesty (F17)

Select vendors and merchandise according to criteria established by the organization. To perform this task, the expeditor/purchasing agent learns/knows the organization's policies and procedures for selecting new vendors and merchandise; internalizes a commitment to these policies and procedures; seeks and interviews vendors to obtain new merchandise to benefit the organization, and selects the vendors and merchandise that best meet the organization's needs and objectives. Task ID#: 7171901

Be honest about a deal you might make with a vendor. To perform this task, the expeditor/purchasing agent talks candidly with the vendor and honestly informs the vendor about the organization's needs and desires and about the expeditor's feelings on the deal. Task ID#: 7172111

Plastic Molding Machine Operator (Based on Four Interviews)

Plastic molding machine operators tend machines that produce plastic products through a variety of methods, such as injection molding. Plastic molding machine operators feed plastic pellets into the machine, monitor the temperature and the molding time, and remove the finished piece.

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	4.50	.58
C10	Teaches Others	4.00	.00
C07	Interprets and Communicates Information	3.75	.50
C16	Monitors and Corrects Performance	3.75	1.26
C06	Organizes and Maintains Information	3.25	1.50
C14	Works with Cultural Diversity	3.25	1.50
C15	Understands Systems	3.00	1.41
C01	Allocates Time	2.75	1.26
C12	Exercises Leadership	2.50	1.00
C05	Acquires and Evaluates Information	2.25	1.26
C19	Applies Technology to Task	2.00	1.41
C13	Negotiates to Arrive at a Decision	1.75	.96
C18	Selects Technology	1.75	1.50
C03	Allocates Material and Facility Resources	1.00	.00
C02	Allocates Money	1.00	.00
C04	Allocates Human Resources	1.00	.00
C11	Serves Clients/Customers	1.00	.00
C08	Uses Computers to Process Information	1.00	.00
C17	Improves and Designs Systems	1.00	.00
C20	Maintains and Troubleshoots Technology	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	4.25	.96
F05	Listening	4.25	.50
F17	Integrity/Honesty	4.25	.50
F15	Social	4.00	.00
F11	Knowing How to Learn	3.75	1.26
F03	Arithmetic	3.75	.96
F01	Reading	3.75	1.26
F14	Self-Esteem	3.75	1.26
F02	Writing	3.25	.96
F06	Speaking	3.25	1.71
F12	Reasoning	3.00	1.15
F08	Decision Making	3.00	.82
F16	Self-Management	2.75	1.26
F07	Creative Thinking	2.50	1.00
F10	Seeing Things in the Mind's Eye	2.50	1.29
F09	Problem Solving	2.25	1.26
F04	Mathematics	2.00	1.15

Job: Plastic Molding Machine Operator

Allocates Time (C01)

Plan how to work each product line according to the machine's output rate. To perform the task, the plastic molding machine operator paces the following steps to accommodate the machine's output rate: remove each part from the machine or chute after it is ejected from the mold; insert the part in the product's holder or fixture before it gets cold in order to hold it for the cooling and setting, if necessary; pick up and inspect the cooled part and trim any excess plastic; and burn the product under a heat gun and put it into a box. Task ID#: 8011091

Produce a specified minimum number of boxes of material over an eight-hour shift. To perform the task, the plastic molding machine operator begins the shift by completing any partially filled boxes left from a previous work shift or by starting to fill a new box. The operator records at which point he or she begins the process. He or she runs the machine at a steady 100-120 rpms, fills the boxes, records any down time, and picks up the work pace if necessary in order to meet the minimum requirements. Task ID#: 8011381

Acquires and Evaluates Information (C05)

Maintain daily records of the plastic molding machine's functioning. To perform the task, the machine operator records an hourly feed rate of grams per hour on the feed rate form. He or she also checks dials and gauges and records the number of dirt prevention screens left at the end of each work shift. Finally, the operator notifies the supervisor of any machine-related problems. Task ID#: 8051281

Organizes and Maintains Information (C06)

Complete a "P" chart—a statistical process control chart. To perform this task, the plastic molding machine operator goes to the P chart each hour and sums up all of the defects, by type, that occurred during the previous hour. The operator also records and graphs the percentage of bad product. These figures are then reviewed against the allowable percentage for bad product. The allowable percentage varies according to the output rate of the machine. Finally, when the percentages exceed the boundary of the expected value range, recommended process changes are recorded. Task ID#: 8061091

Interprets and Communicates Information (C07)

Communicate the P chart analysis to the set-up operator. To perform the task, the plastic molding machine operator completes P charts over time and identifies a pattern of defects in the out-of-bounds output. The operator notifies the set-up person, interpreting and communicating the identified problem. Task ID#: 8071111

Communicate to the supervisor that the machine's process is not operating correctly. To perform the task, the plastic molding machine operator recognizes a problem with how the injection molding process is running and alerts the supervisor about the problem. Task ID#: 8071391

Participates as a Member of a Team (C09)

Treat shift co-workers as teammates in handling output. To perform the task, the plastic molding machine operator observes co-workers and notices when and how co-workers may need help, such as to catch up on work output. The operator helps others by providing materials they may need or by operating the press. The operator also may help co-workers by working for them while they take breaks, and by treating them as the operator would like to be treated. Task ID#: 8091111

Teaches Others (C10)

Provide on-the-job training to new workers assigned to a plastic molding machine operator. To perform this task, the trainer assigns several new workers to shadow a specific operator. This operator demonstrates and explains activities executed during the course of daily job performance. The operator also works with these trainees as they begin to perform work-related activities and, finally, teaches them the workings of the system. Task ID#: 8101091

Share job information with new machine operators. To perform the task, the plastic molding machine operator teaches a new operator the meaning and importance of machine gauge readings; and familiarizes the new worker with necessary procedures, such as those surrounding the machine cycle or how to check material and record feed rate. The operator allows the new worker to operate the machine and to change the dirt screen, with supervision. The plastic molding machine operator then instructs the new worker about pressure gauges and the need to watch pellets, teaches the worker how to be observant, and shows him or her what paperwork is necessary and how it is completed. Finally, the operator observes the new worker for a time and then allows him or her to operate a machine independently. Task ID#: 8101381

Teach new operators how to perform the functions of the job. To perform the task, the plastic molding machine operator trains the new operators to distinguish between a good and bad part by showing them what each part looks like. The worker also models assembly and injection molding process procedures for new operators. The operator monitors the new employees while they perform the above-mentioned operations. The new operators work independently upon the decision of the supervisor. Task ID#: 8101391

Understands Systems (C15)

Understand how the machine makes the product and thus be able to complete the P chart. To perform this task, the plastic molding machine operator identifies machine output which is out of bounds. The operator communicates this information to the set-up operator, who makes necessary changes. The operator then records any changes made to the machine. Task ID#: 8151091

Monitors and Corrects Performance (C16)

Complete the firm's P charts. To perform the task, the plastic molding machine operator removes products from the press and inspects them against the specified criteria. Defects are recorded and charted hourly on the P chart. Further, the operator records out-of-range values on the back of the chart. Task ID#: 8161111

Monitor gauges and dials to ensure that the machine operates at the proper rate of speed. To perform the task, the plastic molding machine operator turns on the machine and allows it to stabilize. The operator scans all gauges and dials, including those for the melt rate and extruder rpm, to ensure that the machine is operating optimally. Any problems with the machine's operation are solved by turning down the feed rate and changing the dirt screen, or turning off the feed rate when necessary to readjust the machine. Task ID#: 8161381

Selects Technology (C18)

Select the proper technology needed to complete a product within specifications based upon the nature of the product and output. To perform the task, the plastic molding machine operator removes the product from the press and allows it to cool. The operator then identifies areas to be trimmed or burned and selects the proper tools for use in these processes. Next, the tools are applied to the task at hand. Task ID#: 8181111

Applies Technology to Task (C19)

Set up the machine for the day's run. To perform the task, the plastic molding machine operator connects the pellitizer, starts the spin dryer and water pump, turns up the feed rate at regular intervals until the optimal rate is reached, and watches all gauges to ensure that they are correct. Task ID#: 8191381

Reading (F01)

Check for product defects. This requires reading workmanship criteria. To perform the task, the plastic molding machine operator physically lifts the product and inspects it visually for defects. The operator compares the information gathered with the written workmanship specifications. The operator needs to understand the meaning of the specifications in order to make this comparison. The machine operator reviews the charts to interpret the numerics of the specifications and records defective products on the P chart. Task ID#: 7011111

Writing (F02)

Document the reasons why a machine's efficiency seems below standard. To perform this task, the plastic molding machine operator obtains and graphs machine data, noting data which are out of specified bounds. The operator then informs the machine set-up person of the problem, determines the nature of the defects, and writes any conclustions down on the back of the chart. Task ID#: 7021091

Listening (F05)

Understand a supervisor's instructions which relay the procedures for finding rejected or defective parts. To perform the task, the plastic molding machine operator receives instructions from the supervisor concerning how to spot defective parts. The operator listens to and assimilates the information and asks questions if clarification is needed. Task ID#: 7051391

Speaking (F06)

Communicate to the supervisor about work situations, for example, that the melt pump is running slowly. To perform the task, the plastic molding machine operator scans the machine's monitor and notices a drop in the melt pump's rpm reading. At this point, the operator either shuts down the machine or turns down the feed rate. The operator then speaks with the supervisor, informing him or her that the melt pump is running slow. The operator also explains that the gauges indicate a problem. The operator then returns to the machine and attempts to discover the nature of the problem. Task ID#: 7061381

Decision Making (F08)

Decide upon the quality of a plastic part. To perform the task, the plastic molding machine operator visually inspects the finished plastic part. The inspection is based upon previous instructions or knowledge concerning the characteristics of good and bad parts. As a result of this inspection, the operator determines whether the part is good or defective. If the part is deemed defective, the operator decides upon one of two courses of action: place the part into a reject box or consult with the supervisor about action to be taken. Task ID#: 7081391

Problem Solving (F09)

Deal with a machine that is working too hard for the polymer which is running through it, causing a rapid change in the machine. To perform the task, the plastic molding machine operator notices that the machine is running too hard and turns down the feed rate to zero. The operator also turns down the melt pump and the extruder; shuts down the dryer, pellitizer and spin dryer; lets the water drain out; and sets the machine up to be purged. The operator puts a steel blocking device into the machine to keep the plastic from moving to the opposite ends of the pipe during the procedure. Following this, he or she uses the machine's dials to increase the values of the extruder and feed rate and then turns on the melt pump and the extruder. After the machine has stabilized, the extruder and feed rates are increased considerably and the machine is purged for ten to fifteen minutes. Next, the machine is cleaned and the pellitizer is reinserted. Finally, the machine is turned on, stabilized, and increased in feed rate to maximum capacity. Task ID#: 7091381

Seeing Things in the Mind's Eye (F10)

Interpret and apply workmanship criteria to product output. To perform the task, the plastic molding machine operator reviews the workmanship chart, looking at its pictorial definitions. The operator interprets and compares the pictorial representations to the product information and determines the relationship between the criteria and the product. Task ID#: 7101111

Knowing How to Learn (F11)

Attend daily training sessions. The plastic molding machine operator attends two daily training sessions on how to assemble parts and what to do with output from their assigned press. The operators work on 12-hour shifts and change presses every six hours. To perform the task, the operator reports to the assigned press, and listens to and understands the given instructions. The operator asks clarification questions, if necessary. Task ID#: 7111091

Responsibility (F13)

Ensure that the parts packed are defect-free. To perform this task, the plastic molding machine operator removes each part from the machine or chute after the part is ejected from the mold. The operator inserts the part in the product's holder or fixture before it gets cold in order to hold it for cooling and setting, if necessary. After this process is completed, the cooled part is picked up and inspected and any excess plastic is trimmed. Finally, the product is completed by burning it under a heat gun and then putting it into a box. Task ID#: 7131091

Social (F15)

Work well in group situations, such as on the assembly line for a product. To perform the task, the plastic molding machine operator interacts with other group members to ensure that they are all working at a consistent speed; relays his or her needs to the group, such as the need to slow down or for others to pick up the work pace; and interacts with other group members to discuss identified problems, such as the recognition of a defective part. Task ID#: 8091391

Integrity/Honesty (F17)

Apply the quality control function in ways that optimize business output. To perform the task, the plastic molding machine operator critically applies the workmanship criteria to reject products. The process by which one determines defects can have a detrimental impact on business, for example, by packing poor products in the bottom of a box or rejecting good products, so the process must be done honestly. Task ID#: 7171111

Blue Collar Worker Supervisor (Based on Four Interviews)

Regardless of actual title, blue collar worker supervisors direct the activities of other employees and ensure the proper and efficient use of equipment and materials. Supervisors make work schedules and keep production and employee records. They plan employees' activities and anticipate unforeseen problems. In addition, blue-collar worker supervisors inform others of company policies, and identify good and poor performers for recognition, remediation, and discipline.

Competencies		Mean	Std. Dev.
C15	Understands Systems	4.75	.50
C01	Allocates Time	4.75	.50
C09	Participates as a Member of a Team	4.50	.58
C12	Exercises Leadership	4.25	.96
C04	Allocates Human Resources	4.25	.96
C10	Teaches Others	4.25	.96
C05	Acquires and Evaluates Information	4.00	1.41
C19	Applies Technology to Task	3.75	.96
C06	Organizes and Maintains Information	3.75	.96
C20	Maintains and Troubleshoots Technology	3.75	1.50
C03	Allocates Material and Facility Resources	3.75	.96
C16	Monitors and Corrects Performance	3.50	1.29
C07	Interprets and Communicates Information	3.50	.58
C08	Uses Computers to Process Information	3.25	1.26
C14	Works with Cultural Diversity	3.25	1.50
C13	Negotiates to Arrive at a Decision	3.00	1.41
C17	Improves and Designs Systems	2.75	1.26
C18	Selects Technology	2.50	1.29
C11	Serves Clients/Customers	2.00	1.15
C02	Allocates Money	1.75	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	4.75	.50
F05	Listening	4.50	1.00
F09	Problem Solving	4.25	.50
F08	Decision Making	4.25	.96
F06	Speaking	4.25	.96
F17	Integrity/Honesty	4.25	.50
F02	Writing	4.00	1.41
F03	Arithmetic	4.00	1.15
F01	Reading	4.00	1.15
F14	Self-Esteem	4.00	1.15
F16	Self-Management	4.00	.82
F15	Social	3.75	.96
F11	Knowing How to Learn	3.75	.96
F12	Reasoning	3.75	.96
F07	Creative Thinking	3.25	.96
F04	Mathematics	3.25	.96
F10	Seeing Things in the Mind's Eye	3.25	.96

Job: Blue Collar Worker Supervisor

Allocates Time (C01)

Organize/adjust the daily schedule to incorporate on demand assignments. To perform this task, the blue collar worker supervisor, who has received an unexpected assignment to prepare a product forecast, assesses current capacities to produce the product; determines equipment needs to increase current production figures; submits recommendations to the engineering department for preliminary cost estimates; and prepares and submits a memo summarizing the equipment needs and costs. Task ID#: 8011911

Review and schedule orders for production within a specified time frame. To perform this task, the blue collar worker supervisor receives copies of order requests daily; evaluates orders to determine priority requirements; checks inventory to ensure that the raw material to fill standard and custom orders is available; orders raw materials, if necessary; schedules job/order for production; and satisfies the requirements of manufacturing and filling various product orders to meet customer deadlines. Task ID#: 8011521.

Oversee a specified work crew. To perform this task, the blue collar worker supervisor supervises a large and diverse work crew schedules, and assigns the workers according to their abilities. Task ID#: 8041341.

Acquires and Evaluates Information (C05)

Acquire data to justify a cost improvement project. To perform this task, the blue collar worker supervisor implements a process change to determine the effect on yield; identifies improvement, such as yield, on a particular process; retrieves documentation or information that details yield data; evaluates data to determine trends, such as improvement in yield; prepares documentation that details the cost improvement process; submits documentation for approval; and prepares/revises batch records. Task ID#: 8051911

Organizes and Maintains Information (C06)

Record and maintain purchase requests, purchase invoices, and cost information of raw materials. To perform this task, the blue collar worker supervisor prepares the purchase request or telephones the vendor to request material and records order information. The supervisor also receives material and invoice; verifies product received is product ordered; verifies that price quoted matches the bill; records the price paid for the product in the log book; and maintains inventory records of all materials received and used. Task ID#: 8061521

Participates as a Member of a Team (C09)

Participate as member of the J.I.T. (Just in Time, project management) team to increase the yield of a particular product. To perform this task, after receiving an assignment to represent the production area on a yield improvement project, the blue collar worker supervisor meets with group members weekly to discuss objectives; participates in the decision making process; communicates objectives of the J.I.T. team to the department and area staff; prepares written instructions and submits them to the processing area staff to implement recommended changes; and provides long-term feedback from the processing area to the J.I.T. team members. Task ID#: 8091911

Teaches Others (C10)

Train new employees in production line job tasks. To perform this task, the blue collar worker supervisor identifies and conducts training required for specific tasks; acquaints the employees with the overall company operation; explains company's policies and procedures; assigns new employees to production line personnel for on-the-job training of job tasks and equipment operation; monitors new employees during on-the-job training period; assists personnel, as needed, with individualized training; evaluates new employees at three, six, and twelve month intervals to measure performance; and documents performance for personnel files. Task ID#: 8101521

Improves and Designs Systems (C17)

Write proposal to automate filling process. To perform this task, the blue collar worker supervisor recognizes an inconsistency in yields between different kinds of drying equipment due to the manual filling process; consults with the engineering department staff to determine new technology available to accurately measure volume; reviews recommendations from the engineering department and considers limitations of the new technology; tests the recommended equipment; decides to implement the new technology; and writes a proposal to automate filling process, using the test results to justify. Task ID#: 8171911

Selects Technology (C18)

Select the appropriate filter/dryer to increase the capacity of a particular product. To perform this task, the blue collar worker supervisor examines product literature and attends vendor presentations to observe equipment in operation; meets with the engineering department staff, area equipment operators, and quality control staff to decide on the best equipment and to select a vendor; installs the equipment to run test; compiles data from the results and prepares slides/transparencies and charts for a visual presentation; presents recommendations to management for approval; writes cost justification for the equipment, including data on labor savings impact; submits the cost justification to the engineering department for a capital expenditures request; upon approval, installs the equipment; and writes operating procedures. Task ID#: 8181911

Writing (F02)

Prepare written documentation of a chemical production process (batch records). To perform this task, the blue collar worker supervisor receives a written request from the Chemistry Services Department to perform a specified production process, such as filtration; writes a procedure to be followed or assembles written instructions into the desired format, applying knowledge of chemical processing procedures and equipment; sends a draft to the Formula Cards Department for typing; submits typed cards to the review board for approval; modifies cards for approval by the review board, as needed; distributes the final version of the batch records to the staff; instructs the staff to perform the specified procedure; and oversees completion of the task. Task ID#: 7021911

Decision Making (F08)

Prioritize the order of processing to resolve a conflict in scheduling. To perform this task, the blue collar worker supervisor recognizes a conflict between the daily processing schedule and on demand processing requests; becomes familiar with the processing schedule and equipment utilization for the entire area; decides which process should be run first, applying knowledge of the processing priorities; gives verbal order to processing equipment operator; and notifies the planning and scheduling department of the change in scheduling of processing. Task ID#: 7081911

Problem Solving (F09)

Resolve problems in the manufacture of a product to ensure that sequential operations are completed in a timely manner. To perform this task, the blue collar worker supervisor recognizes that a problem exists in the sequence of manufacturing a product which is delaying the overall operation and analyzes possible reasons for the problem; reviews alternative methods to streamline operations, such as shifting personnel to different work tasks or replacing equipment; selects the most appropriate method and implements the change; and trains the staff in the new job task or new equipment operation. Task ID# 7091521.

Integrity/Honesty (F17)

Prepare accurate and truthful written documentation of processing procedures to ensure compliance with government regulations. Task ID#: 7171911

Trade, Transportation, and Communications

Traffic, Shipping and Receiving Clerk (Based on Three Interviews)

Traffic, shipping and receiving clerks keep track of goods transferred between business and their suppliers and customers. Responsibilities include recording incoming and outgoing freight data, verifying quantity and products sent/received; processing claims; counting, weighing and measuring contents; inspecting packaging; verifying invoices; and putting information into and retrieving information from a computer.

Competencies		Mean	Std. Dev.
C08	Uses Computers to Process Information	5.00	.00
C06	Organizes and Maintains Information	4.67	.58
C12	Exercises Leadership	4.00	1.00
C14	Works with Cultural Diversity	4.00	.00
C09	Participates as a Member of a Team	4.00	1.00
C05	Acquires and Evaluates Information	4.00	1.73
C07	Interprets and Communicates Information	3.67	1.53
C15	Understands Systems	3.67	1.15
C01	Allocates Time	3.33	2.08
C10	Teaches Others	3.33	.58
C16	Monitors and Corrects Performance	3.33	2.08
C11	Serves Clients/Customers	2.67	1.53
C20	Maintains and Troubleshoots Technology	2.67	2.08
C13	Negotiates to Arrive at a Decision	2.67	1.53
C17	Improves and Designs Systems	2.67	2.08
C03	Allocates Material and Facility Resources	2.33	2.31
C18	Selects Technology	2.33	1.53
C19	Applies Technology to Task	2.33	1.53
C02	Allocates Money	1.00	.00
C04	Allocates Human Resources	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F01	Reading	5.00	.00
F02	Writing	4.67	.58
F13	Responsibility	4.67	.58
F17	Integrity/Honesty	4.67	.58
F14	Self-Esteem	4.67	.58
F05	Listening	4.33	.58
F11	Knowing How to Learn	4.33	.58
F03	Arithmetic	4.33	1.15
F06	Speaking	4.00	1.00
F15	Social	3.67	.58
F12	Reasoning	3.67	1.53
F16	Self-Management	3.33	.58
F09	Problem Solving	3.33	.58
F04	Mathematics	2.67	2.08
F07	Creative Thinking	2.00	1.00
F10	Seeing Things in the Mind's Eye	2.00	1.00
F08	Decision Making	1.67	1.15

Job: Traffic, Shipping and Receiving Clerk

Allocates Time (C01)

Prepare a schedule to unload trucks. To perform the task, the shipping and receiving clerk first receives a call from the terminal manager specifying which delivery trucks to expect. Following this notification, the clerk prepares a daily schedule for truck deliveries; estimates the number of workers required to unload the trucks; makes schedule changes to accommodate truck delivery cancellations or truck breakdowns; and ensures that specified required deliveries are worked into the schedule. Task ID#: 8011321

Acquires and Evaluates Information (C05)

Obtain all necessary paperwork regarding the shipment or receipt of parts and materials and review the information prior to taking any action. To perform the task, the shipping and receiving clerk removes the packing slip from the accompanying crate or carton; reviews the relevance and accuracy of information on the slip; obtains shipping request form from the accounting department and material to be shipped from the shipper; and checks information on the form against the material to be shipped to determine if all relevant information is accurate (e.g., quantity, size, marking). Task ID#: 8051531

Uses Computers to Process Information (C08)

Enter merchandise receiving data into the computer terminal. To perform the task, the shipping and receiving clerk counts and verifies the shipped order; enters necessary order data into the computer terminal; and uses the computer to retrieve and verify data and to enter corrections, such as numbers, style, or locations. Task ID#: 8081321

Input incoming product data. To perform the task, the shipping and receiving clerk receives data on incoming goods and materials. The clerk uses a Cathode Ray Terminal (CRT) to input this data to match the information found in the purchasing order. Task ID#: 8081291

Participates as a Member of a Team (C09)

Communicate and cooperate with other workers on shipping, receiving, and/or stock teams to ensure that materials are unloaded and transported to designated storage areas or assembly lines in a timely manner. To perform the task, the shipping and receiving clerk unloads material from the truck to dock; loads material on to the automatic guidance system (AGS) or requests help in loading the material onto the AGS; programs the destination of the AGS; notifies the line stocker that needed parts have arrived so that he or she can unload the needed parts and act upon them as needed; and reprograms the AGS to return to the shipping dock so that equipment will be accessible as needed. Task ID#: 8091531

Negotiates to Arrive at a Decision (C13)

Deal effectively with buyers. To perform the task, the shipping and receiving clerk negotiates procedural changes with buyers to facilitate the receipt of goods and materials. Task ID#: 8131291

Understands Systems (C15)

Unload and direct material throughout the plant to storage and assembly line, in accord with company policy. To perform the task, the shipping and receiving clerk looks up and identifies the storage area for a specific part from a company layout plan; knows how materials flow in and out of the system; and knows the procedures for shipping materials out of the plant and for returning misdirected or excess materials. Task ID#: 8151531

Improves and Designs Systems (C17)

Determine more efficient ways to stack merchandise. To perform the task, the shipping and receiving clerk observes the processes involved in loading, unloading, and moving merchandise; develops an idea for performing these activities more efficiently; shares the idea with his or her supervisor; and implements changes which ultimately save money or prevent damage to merchandise. Task ID#: 8161321

Maintains and Troubleshoots Technology (C20)

Detect and resolve computer problems. To perform the task, the shipping and receiving clerk identifies and interprets messages on the computer screen indicating that the computer is not functioning correctly; acts upon the message by correcting the error and re-entering the affected data; and asks for assistance if he or she is not able to solve the problem. Task ID#: 8201321

Reading (F01)

Read the freight bill which accompanies delivered merchandise. To perform the task, the shipping and receiving clerk reads the packing slip which accompanies delivery and merchandise labels to verify the delivery of the correct number and type of product; reviews the bill to determine if the order is pre-paid or the fee is to be collected, how many copies of the order are needed, and where to distribute the copies; and inspects the bill to detect any errors such as misprints, incorrectly added items, etc. Task ID#: 7011321

Read work schedule and work-related documents to determine if materials or parts received or shipped match the description of the items listed on the accompanying paperwork. To perform the task, the shipping and receiving clerk obtains and reviews the package slip to determine what parts were received; reviews the shipping request to determine what parts were requested and how they were to be shipped; unloads parts; counts and checks items by part number to determine the correspondence between the quantity and number on the parts and the information contained in the packing slip; completes a checker's tally form and records any discrepancies noted; completes a special form to notify the shipper that misdirected material was received and will be returned; reviews the shipping request; and checks the information on the form against the parts which accompany the form. Task ID#: 7011531

Speaking (F06)

Converse with a variety of individuals to facilitate all aspects of the work process. To perform the task, the shipping and receiving clerk requests credentials from the truck driver to ensure that documents are in order; directs the carrier to the appropriate receiving dock; explains any problems which may have been encountered to the dock supervisor; requests assistance when the situation requires the approval of a higher authority; informs the proper authority of outgoing shipments and requests a signature and approval of the action; and converses with shipping and receiving area workers and line stockers to elicit assistance in moving materials to their destinations and in locating needed parts. Task ID#: 7061531

Reasoning (F12)

Visually inspect parts to determine whether they are the same as those listed on the accompanying paperwork. To perform the task, the shipping and receiving clerk obtains a packaging slip; inspects parts against the packing label description to determine whether the shipment is correct; and disposes of parts throughout the plant by transporting them to a designated area, requesting assistance, or loading material onto an automatic guidance system, depending upon the urgency of the need for the parts. Task ID#: 7121531

Responsibility (F13)

Maintain data files for easy access. To perform the task, the shipping and receiving clerk maintains on a daily basis the data necessary for the monthly reports and is able to create a status report with little advance notice. Task ID#: 7131291

Store materials and parts in a safe and secure area. To perform the task, the shipping and receiving clerk places material in a safe and secure place until pick up or shipment in order to prevent damage or loss, and locates and transports requested parts in a timely manner in order to prevent operations from stopping or slowing down. Task ID#: 7131531

Self-Esteem (F14)

Deal with job-related problems and discrepancies. To perform the task, the shipping and receiving clerk deals with order discrepancies by knowing when the job has been properly handled and standing behind his or her work, and is prepared to accept responsibility for his or her errors. Task ID#: 7141291

Integrity/Honesty (F17)

Count and record merchandise and admit mistakes that are made. To perform this task, the clerk performs the job that is assigned and honestly accounts for all materials and parts. Task ID#: 7171321

Check paperwork to ensure that no parts or materials leave or enter the premises without proper authorization. To perform the task, the shipping and receiving clerk reviews the shipping request form and compares the quantity and part numbers of the materials to be loaded before loading them onto the truck; reports any discrepancies between the parts and the shipping request form to the appropriate individual; checks incoming shipments against the packing slip or bill of loading; and reports unaccounted for or excess material to the proper authority for return. Task ID#: 7171531

Order Filler (Based on Five Interviews)

Order fillers fill customers' mail and telephone orders and mark the price of merchandise on order forms. They read orders to ascertain catalog number, size, color, and quantity of merchandise and obtain merchandise from bins or shelves. Order fillers compute price of each group of items and place merchandise on conveyer leading to wrapping area.

Competencies		Mean	Std. Dev.
C09	Participates as a Member of a Team	4.80	.45
C11	Serves Clients/Customers	4.20	1.79
C15	Understands Systems	4.00	.71
C14	Works with Cultural Diversity	4.00	1.00
C07	Interprets and Communicates Information	3.80	.84
C13	Negotiates to Arrive at a Decision	3.40	.55
C01	Allocates Time	3.40	.89
C06	Organizes and Maintains Information	3.20	1.48
C05	Acquires and Evaluates Information	3.20	1.30
C10	Teaches Others	3.20	1.10
C12	Exercises Leadership	3.20	1.30
C20	Maintains and Troubleshoots Technology	3.00	1.58
C16	Monitors and Corrects Performance	2.80	.84
C04	Allocates Human Resources	2.80	1.64
C03	Allocates Material and Facility Resources	2.80	1.48
C08	Uses Computers to Process Information	2.60	2.19
C19	Applies Technology to Task	2.60	1.82
C18	Selects Technology	2.20	1.10
C17	Improves and Designs Systems	1.80	.84
C02	Allocates Money	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	5.00	.00
F01	Reading	4.80	.45
F17	Integrity/Honesty	4.60	.89
F05	Listening	4.60	.55
F11	Knowing How to Learn	4.40	.55
F15	Social	4.20	.45
F06	Speaking	4.20	.84
F09	Problem Solving	4.00	1.22
F16	Self-Management	4.00	.71
F08	Decision Making	3.80	.84
F14	Self-Esteem	3.80	.45
F12	Reasoning	3.60	.89
F03	Arithmetic	3.20	1.30
F02	Writing	3.20	1.10
F07	Creative Thinking	3.20	1.64
F10	Seeing Things in the Mind's Eye	2.80	1.30
F04	Mathematics	2.00	1.22

Job: Order Filler

Allocates Time (C01)

Select all of the assigned merchandise within a 55-minute period. To perform this task, the order filler knows that there are 55 minutes in which to select all items; knows the number of tickets (i.e., the number of items needed); and calculates the appropriate time for assembling all merchandise. Task ID#: 8011641

Prioritize return calls and orders placed with the fax machine. To perform the task, the order filler returns telephone calls first and determines which customers have requested same-day or next-day service; for orders requiring same-day service, determines the time remaining before the end of the order period; and after filling the orders due in the current time period, schedules orders for the following day. Task ID#: 8012301

Allocates Material and Facility Resources (C03)

Ensure that the proper materials are pulled from the storage bins and given to the customer. To perform the task, the order filler acquires a salesperson's order form from the order box, obtains credit approval, and determines if the order is cash on delivery (COD); locates the appropriate amount of material from the warehouse by material number; pulls the material from the warehouse bins; places the materials in the proper location based upon the shipping destination; obtains a quantity number from the order form; and writes the number on relevant boxes and bags to indicate the quantity of the material to be shipped. Task ID#: 8032311

Organizes and Maintains Information (C06)

Turn in "wait" tickets (i.e., tickets for merchandise that is now out-of-stock) at the end of a specified period. To perform this task, the order filler realizes that the bin is empty; keeps ticket, rather than discarding it; and deposits it in a specified box; and carries out the correct steps to turn in wait ticket at the end of the period. Task ID#: 8061641

Interprets and Communicates Information (C07)

Handle customer complaints. To perform the task, the order filler listens to a customer's description of the item(s) that had been requested but not received; asks the customer for detailed information about the item(s), such as size, quantity, and/or color; and obtains the customer's name, telephone number, and a convenient call back time; takes steps to determine if the item can be exchanged; asks the manager about any appropriate actions (e.g., exchange, refund); and calls the customer to verify the problem and inform him or her of the solution. Task ID#: 8072301

Communicate a down time situation to co-workers, and explain the situation so that everyone can understand it. To perform this task, the order filler diagnoses and evaluates the problem; determines its importance and who will be affected and who will suffer the most; decides whom to contact for assistance; decides on an alternative plan; and implements it. Task ID#: 8071651

Uses Computers to Process Information (C08)

Use the computer to ship packages. To perform this task, the order filler reads the work order to ascertain the type of shipping requested; enters the information (e.g., destination, date, and weight) into the specified shipping computer; prints a label and attaches it to the package; and places the package in the proper place to be prepared for shipping. Task ID#: 8081961

Participates as a Member of a Team (C09)

Help out in different departments as needed. To perform this task, the order filler tells the manager when he or she is having a slow period; reports to a department where extra help is needed, as specified by the manager; and works temporarily in that department until requested to return to his or her own department. Task ID#: 8091961

Serves Clients/Customers (C11)

Help attract new customers. To perform the task, the order filler supplies a potential customer with a variety of information, such as pricing, delivery schedules, and payment methods; obtains the customer's zip code to ascertain if they live too far away to be served by the company; and offers to send a catalog with information. Task ID#: 8112301

Understands Systems (C15)

Retrieve a product from the warehouse to serve a customer who has made a request after the order cut-off period. To perform the task, the order filler assures the customer that he or she will make every effort to satisfy the last minute request but will offer no promises; records the order on paper; obtains the order number from the computer, including the van assignment and time period; and asks the appropriate worker to include the item in the order and informs him or her of the order number. Task ID#: 8152301

Understand the rules and regulations governing a company's handling of materials. To perform the task, the order filler knows the following: procedures surrounding the completion of order forms, the promotion system, procedures for dealing with customer contingencies (i.e., for COD customers, the filler informs the truck driver not to leave the material on-site unless the customers supply a certified check), the location of materials in the warehouse, the distribution of the work hours (i.e., lunch hour), and the health and safety system (i.e., where to go and what to do if hurt on the job). Task ID#: 8152311

Applies Technology to Task (C19)

Operate a forklift and ensure that it is in proper operating condition. To perform the task, the order filler recognizes and informs maintenance personnel if oil is leaking from the forklift; ensures that the battery has enough water, the forklift has enough gasoline, the electric lifts are correctly charged, the hydraulic system is used properly, the brakes and horn work, and the tires and wheels are in good condition; drives the forklift and becomes licensed which indicates that the worker has passed a specific test. Task ID#: 8202311

Maintains and Troubleshoots Technology (C20)

Perform a maintenance check and complete a maintenance report on a forklift or other piece of heavy equipment. To perform this task, the order filler checks the battery and oil level; spots defects; checks lights, horn, and other electrical accessories; completes repair form, if necessary; and attaches an out-of-order tag to the vehicle, if necessary. Task ID#: 8201651

Fix a jam in the label maker. To perform this task, the order filler shuts off the label-maker; finds and removes the jam; and restarts the machine. Task ID#: 8201961

Reading (F01)

Read a factory work order sheet for shipping instructions. To perform this task, the order filler obtains a package and factory work order; reads the work order to obtain information on how to ship the package and the deadline for shipping; and ships the order in the prescribed manner. Task ID#: 7011961

Read manuals concerning the operation of forklifts. To perform the task, the order filler reads about the following: different ways to operate a forklift, the optimal height to lift materials, the need to watch for pedestrians, and how to secure the forklift. Task ID#: 7012311

Listening (F05)

Listen to the walkie-talkie for information regarding problems. To perform this task, the order filler hears, reacts, and provide answers to questions. Task ID#: 7051651

Take telephone orders. To perform the task, the order filler greets a potential customer over the telephone, and identifies the name of the company and himself or herself; listens to the customer's information on desired date and time of delivery and enters this information into the computer; records the size, brand name, color, and quantity of items requested; verifies the accuracy of each item; estimates the cost for the customer; verifies the delivery date and time; asks the customer about method of payment; and, thanks the customer and terminates the conversation. Task ID#: 7052301

Decision Making (F08)

Prioritize merchandise delivery to accommodate schedules of all involved in getting merchandise out. To perform this task, the order filler determines others' schedules; knows the particular demands of other departments (e.g., whether monogrammers are running short-handed); is familiar with the packers' schedules; reacts to announced volume of merchandise to be shipped that day; and delegates responsibility so that he or she is free to see that workers in another unit are getting the merchandise in time to complete their work. Task ID#: 7081651

Problem Solving (F09)

Handle customer complaints. To perform the task, the order filler listens to the customer's complaints and concerns and records these on paper, retrieves his or her order in the computer, and reviews it with the customer; pinpoints the cause of the problem and assures the customer that it will be corrected; if the wrong item(s) has been sent, credits the customer's account and allows him or her to keep the item(s); and tries to identify any internal causes for the problem. Task ID#: 7092301

Attend to the sizes of materials stored in warehouse bins and analyze the sizes of the materials to be shipped. To perform the task, the order filler determines whether the proper size of an item is in the appropriate storage bin. He or she pulls the material if it has been stored properly. If the bin houses improper sizes of the item, the order filler rearranges the bins, placing the correct sized materials in the correct bins. Finally, the order filler analyzes the material needed to be combined in order to make the requested part. Task ID#: 8072311

Knowing How to Learn (F11)

Learn the order filler's job, and be prepared to handle new responsibilities (e.g., those of the "troublerunner" who diagnoses and fixes problems in order-filling procedures). To perform this task, and the order filler learns company policy as well as a number of job-specific activities (e.g., how to match item numbers, how to pick up merchandise with both the left and right hand). Task ID#: 7111641

Learn shipping regulations quickly. To perform this task, the order filler obtains, reads, and memorizes a specific shipping regulation manual as quickly as possible. Task ID#: 7111961

Responsibility (F13)

Ensure reliable attendance, because replacements may not always be available (for example, during the peak months just before Christmas). To perform this task, the order filler checks on other workers' schedules, and knows the demands of peak season. Task ID#: 7131651

Be responsible for decisions when the manager is not available. To perform this task, the order filler reads factory orders and prioritizes them; corrects any shipping problems when they arise; and ships packages per the specified system. Task ID#: 7131961

Ensure that the correct material is loaded on the truck. To perform the task, the order filler verifies the items on the truck against those listed on the order form; loads the materials onto the truck; and supplies the truck drivers with the accompanying paperwork. The order filler also ensures that hazardous material forms are supplied to relevant customers, that copies of such forms are placed in the file and that customers are satisfied with the service received. Task ID#: 7132311

Social (F15)

Ensure the comfort of new employees. To perform the task, the order filler interacts in a friendly manner and makes the new employee feel comfortable; offers assistance, if needed; and trains the employee on the use of the computer and on questions to ask customers to pinpoint the details of an order. Task ID#: 7152301

Integrity/Honesty (F17)

Select all of the items that the order filler has tickets for and resist the urge to discard some tickets to lighten the workload. To perform this task, the order filler starts selecting merchandise listed at the very top of his or her stack; checks starting and ending points before starting to select merchandise, so that at the end of the order, the order filler knows where in the shelves he or she should have completed the order, and ensures that the order is delivered to the correct location. Task ID#: 7171641

Outside Equipment Technician (Based on Four Interviews)

These workers, also called Outside Plant Technicians, include Line Installers and Cable Splicers. They are responsible for installing, servicing, and repairing telephones, switchboard systems, and other communications equipment on customers' property (home or business). Installation functions include relocating telephones or making changes on existing equipment and testing the equipment to ensure that it is working. Repairing functions include testing, cleaning, fixing, or replacing faulty equipment or wiring. They operate most types of cable construction equipment and related test equipment.

Competencies		Mean	Std. Dev.
C19	Applies Technology to Task	4.50	1.00
C09	Participates as a Member of a Team	4.50	1.00
C18	Selects Technology	4.25	.96
C10	Teaches Others	4.25	.96
C07	Interprets and Communicates Information	4.00	1.41
C11	Serves Clients/Customers	4.00	1.41
C05	Acquires and Evaluates Information	4.00	.82
C20	Maintains and Troubleshoots Technology	4.00	1.15
C01	Allocates Time	4.00	.82
C14	Works with Cultural Diversity	3.75	1.50
C13	Negotiates to Arrive at a Decision	3.75	1.26
C12	Exercises Leadership	3.50	1.29
C15	Understands Systems	3.50	1.29
C06	Organizes and Maintains Information	3.25	.96
C16	Monitors and Corrects Performance	2.50	1.00
C17	Improves and Designs Systems	2.50	1.29
C03	Allocates Material and Facility Resources	2.50	1.00
C08	Uses Computers to Process Information	2.25	.96
C04	Allocates Human Resources	2.00	.82
C02	Allocates Money	1.50	.58

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F11	Knowing How to Learn	5.00	.00
F05	Listening	5.00	.00
F01	Reading	4.75	.50
F06	Speaking	4.75	.50
F09	Problem Solving	4.75	.50
F15	Social	4.50	.58
F07	Creative Thinking	4.50	.58
F17	Integrity/Honesty	4.50	.58
F13	Responsibility	4.50	.58
F12	Reasoning	4.50	.58
F10	Seeing Things in the Mind's Eye	4.50	.58
F14	Self-Esteem	4.25	.50
F03	Arithmetic	4.00	.82
F04	Mathematics	4.00	.82
F08	Decision Making	4.00	1.41
F16	Self-Management	3.75	.50
F02	Writing	3.50	1.29

Job: Outside Equipment Technician

Allocates Time (C01)

Install equipment at a commercial customer's location. To perform the task, the outside equipment technician coordinates the installation of equipment in a large company while facing deadlines and other work responsibilities. Prior to starting the installation, the technician breaks the job into steps and approximates the installation time; takes into account all contingencies when making estimates in order to meet the company's "turn-up" time specification; and bases the final estimate of time on the times required by similar, previously completed jobs. Task ID#: 8011371

Respond to two dispatches in a timely manner. To perform this task, the outside equipment technician determines what must be tested on the first job and estimates with considerable accuracy the length of time it will take to complete the test and finish the first job. In going from one job to another, the technician draws on knowledge of the area he or she must travel in order to assess and take into account the expected traffic flow and any resulting time delay. Task ID#: 8011431

Acquires and Evaluates Information (C05)

Identify a problem by acquiring and evaluating the information available. To perform this task, the outside equipment technician examines the trouble order, goes to the line where the problem is being experienced, and tests the line to gain information about what the problem might be. The technician evaluates the information from the tests and determines the most likely source of the problem. Task ID#: 8051431

Interprets and Communicates Information (C07)

Interpret information about a customer problem and communicate it to both the customer and the repair group. To perform the task, the outside equipment technician listens to a customer to receive information about a product or service complaint; contacts and gathers information from the communications company technician who has done the initial troubleshooting; interprets the information; and communicates it to the customer and the assigned repair group for use in completing the repair work. Task ID#: 8071371

Participates as a Member of a Team (C09)

Install a point-to-point data circuit, a job that requires action in two locations, such as two cities. To perform the task, outside equipment technicians are dispatched to each of two locations where they access the customer's facilities and work as a team to install the requested circuits. They communicate with each other and work together to overcome any problems which emerge. Task ID#: 8091371

Teaches Others (C10)

Teach a new technician how to perform the job. To perform this task, the more experienced outside equipment technician determines what the new technician knows; divides the areas in which he or she needs instruction; provides instruction in those areas using both oral instruction and hands-on training; takes the new technician to customer locations and shows by example how to deal with customers; critiques the trainee's work on location; and provides feedback to management on other kinds of training the new technician may need. Task ID#: 8101431

Serves Clients/Customers (C11)

Assist, on-site, with a problematic telephone system. To perform the task, the outside equipment technician travels to the site of a customer's problem to investigate, and determines, for example, that the access system on a new telephone configuration has changed and will not work; works with the customer and the local telephone company to adapt the service, (during this period customer may receive no service); and determines that the customer's current equipment is not adaptable to the new configuration. Task ID#: 7151371

Understands Systems (C15)

Understand technical and organizational systems in order to service switch outages. To perform the task, the outside equipment technician is charged with handling a customer's service outage. The technician must understand how the customer's equipment interfaces with the local telephone system in order to properly service the call, and have an understanding of the entire telecommunications system. In order to solve the outage problem, the technician uses his or her knowledge of relevant systems to call the terminal for the proper switch group and moves down the line contacting the right units to resolve the problem. Task ID#: 8151371

Applies Technology to Task (C19)

Install new equipment. To perform the task, the outside equipment technician reviews the customer's request to ascertain the scope of the job; installs the appropriate technology and determines if the application works; involves the appropriate units throughout the installation in order to avoid problems; and tests to ensure that the system is complete. Task ID#: 8191371

Apply technology to testing a multiplex line. To perform this task, the outside equipment technician identifies where the multiplex box is at the location; determines what kind of testing equipment to use; applies the testing equipment appropriately; and interprets the test results and fixes the problem. Task ID#: 8191431

Maintains and Troubleshoots Technology (C20)

Understand the technical system in order to troubleshoot. To perform this task, the outside equipment technician understands the telecommunications network (e.g., microwave radios, digital radios, fiber optics, cables, modems) and the computer systems to determine any problems in routing; isolates the problem in a system; determines which location has the problem; selects the correct back-up team to assist in diagnosis; and once the problem is identified, uses his or her understanding of the system to repair the problem. Task ID#: 8151431

Maintain the technician's vehicle. To perform this task, the outside equipment technician maintains mileage and maintenance records on the vehicle, keeps it clean, and drives safely. Task ID#: 7131431

Listening (F05)

Solve a customer's service problem. To perform the task, the outside equipment technician listens to the inside control group's description of the problem; meets with the customer and listens to their version of the problem to gather additional information; looks at the communications equipment to determine the nature of the problem; works to resolve problems resulting from the communications company products or services; and helps the customer to resolve customer-based problems. Task ID#: 7051371

Speaking (F06)

Meet with high level corporate executives and local telephone personnel to discuss moving equipment from one location to another. To perform this task, the outside equipment technician sets up a meeting with the executive(s) and discusses decisions and problems concerning the move. The technician then meets with the local telephone company personnel to explain what is needed to have the job done in an expeditious way. Task ID#: 7061431

Creative Thinking (F07)

Suggest a different way to identify and solve a critical problem. To perform this task, the outside equipment technician identifies the problem and its source (which may be especially difficult when the problem is an intermittent one), and determines an effective fix (from many possible solutions) for the problem. Task ID#: 7071431

Knowing How to Learn (F11)

Handle a customer problem report that deals with unfamiliar technology. To perform the task, the outside equipment technician becomes aware of the source of a customer's problem (for example, switch involving new technology); familiarizes him or herself with the old technology in order to adapt possible solutions to the new technology; determines the differences between the old and new systems; and knows which people to involve in the process. Task ID#: 7111371

Truck Delivery Salesperson/Outside Sales (Based on Four Interviews)

Truck drivers with sales or customer service responsibilities (driving/sales workers or route drivers) are primarily responsible for delivering their firm's products, but they also represent their company. In general, sales route drivers drive a truck over an established route to deliver and sell products or render services, collect money from customers, and make change. They also contact prospective customers to solicit new business. The duties of driving/sales workers vary by industry, company policies, and the importance placed on sales. Drivers may deliver items such as beer, beverages, bakery products, dry cleaning, laundry, and milk. Most have wholesale routes. After completing their route, these drivers order the items for the next day which they think customers are likely to buy, based primarily on customer discussions, product popularity, time of year, and weather.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	4.75	.50
C01	Allocates Time	4.25	.50
C06	Organizes and Maintains Information	3.75	.96
C14	Works with Cultural Diversity	3.75	.96
C03	Allocates Material and Facility Resources	3.50	1.00
C13	Negotiates to Arrive at a Decision	3.00	.82
C17	Improves and Designs Systems	3.00	.82
C05	Acquires and Evaluates Information	2.75	.50
C07	Interprets and Communicates Information	2.75	1.26
C09	Participates as a Member of a Team	2.75	.96
C16	Monitors and Corrects Performance	2.75	.50
C15	Understands Systems	2.50	.58
C12	Exercises Leadership	2.50	1.29
C08	Uses Computers to Process Information	2.25	1.89
C02	Allocates Money	2.25	1.89
C10	Teaches Others	2.00	.00
C19	Applies Technology to Task	1.75	1.50
C20	Maintains and Troubleshoots Technology	1.75	1.50
C04	Allocates Human Resources	1.25	.50
C18	Selects Technology	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F13	Responsibility	4.75	.50
F06	Speaking	4.50	.58
F17	Integrity/Honesty	4.50	.58
F03	Arithmetic	4.25	.50
F16	Self-Management	4.25	.50
F05	Listening	4.00	.82
F01	Reading	4.00	1.41
F14	Self-Esteem	4.00	.82
F15	Social	3.75	.50
F11	Knowing How to Learn	3.75	.50
F08	Decision Making	3.75	.50
F09	Problem Solving	3.50	1.73
F12	Reasoning	3.25	1.26
F07	Creative Thinking	3.00	.82
F10	Seeing Things in the Mind's Eye	2.50	1.29
F02	Writing	2.25	1.50
F04	Mathematics	1.75	1.50

Job: Truck Delivery Salesperson/Outside Sales

Allocates Time (C01)

Arrange schedules to permit time for calling on new prospects. To perform this task, the truck delivery salesperson reviews route cards for existing appointments and plans the daily activities. The salesperson arranges the schedule to accommodate sales calls as well as to service existing customers (the average sales person has 15-20 customers daily and 70-80 weekly). Task ID#: 8011401

Allocates Material and Facility Resources (C03)

Control the inventory levels of products on the truck to maximize cash flow (e.g., keep appropriate amount of fast selling items on the truck). To perform this task, the truck delivery salesperson determines which slow moving items may be needed occasionally and which specialty items should be kept on the truck for periodic sales; returns items that do not sell; determines the fastest selling items; and decides how many of each fast selling item to carry on the truck as inventory. Task ID#: 8031831

Organizes and Maintains Information (C06)

Maintains proper inventory. To perform this task, the truck delivery salesperson checks the incoming load to determine congruence with the load sheet; checks the merchandise being delivered to customers; takes inventory at the end of the week, and reconciles all records. Task ID#: 8061401

Conduct business transactions on the computer. To perform this task, the truck delivery salesperson generates sales receipts for the customer, showing price, balance owed, and payment method; relays pricing information by keying in the stock number; keeps relevant personal data on the customer (e.g., SSN, telephone number, home address); monitors the inventory level; orders needed stock; and generates financial statements showing collections, sales, receivables, balance, inventory balance, cash sales, open accounts, revolving sales, extended credit, taxable items, etc. Task ID#: 8061831

Serves Clients/Customers (C11)

Call on an existing customer at a time that is best for both the customer and the salesperson. To perform this task, the truck delivery salesperson acquires a familiarity with the routines followed by customers and lays out the route in order to accommodate these routines. Refining knowledge of the customer's schedule, the salesperson helps the customer when possible (e.g., checking the customer's current inventory). Task ID#: 8111401

Instill confidence in the customer that services will be provided reliably and fairly. To perform this task, the truck delivery salesperson assures the customer of dependability (i.e., that the salesperson will be there to provide service needs) and that the salesperson can provide the services and products needed. Task ID#: 8111831

Improves and Designs Systems (C17)

Contribute to making improvements in the firm's operations, such as by suggesting that the company change its inventory mix to match changes in cars and in the marketplace. To perform this task, the truck delivery salesperson identifies the need for a new tool (e.g., for a 1991 car for which a particular tool does not exist); suggests that an item made by other companies could be sold to meet the new need; develops new tools/modifies existing tools; and reports back to the company if the tools do not work. Task ID#: 8171831

Correct the impact of customer loss on the route. To perform this task, the truck delivery salesperson responds to customer loss by reviewing other options for growth. The salesperson redesigns the route to include areas with growth potential. Determining what products are selling, the individual suggests new product lines to the manager. The salesperson also suggests ways to attract and retain customers (e.g., price undercutting) and improvements to management systems (e.g., a system to support salespeople). Task ID#: 8171401

Suggest improvements in the software used for pricing. To perform this task, the truck delivery salesperson identifies problems in a particular piece of software and suggests improvements or ways to make better use of the computer (e.g., the ability to connect into the company modem and order directly, rather than having to generate an order on a PC and send it through the mail). Task ID#: 8201831

Reading (F01)

Research the kinds of tools needed for mechanics by going through catalogs. To perform this task, the truck delivery salesperson looks through the index in the back of the catalog; refers to the appropriate section (e.g., brakes, front end, fuel management); and finds the description/price of the tool in the catalog. If the tool is on the truck, the salesperson sells it to the customer; if not, he or she orders the tool. Task ID#: 7011831

Speaking (F06)

Promote a new product to an existing customer. To perform this task, the truck delivery salesperson develops a knowledge of customer needs over time, learns about a new product, and considers its ability to meet the needs of various customers. The salesperson prepares a sample of the product for customers and presents advertising material about it. Through verbal communication and demonstration, the salesperson shows how to use the product and how to present it on the menu. The salesperson closes the sale by asking for an order. Task ID#: 7061401

Problem Solving (F09)

Collect money from customers. To perform this task, the truck delivery salesperson discusses with a customer his or her failure to pay; determines the reason for non-payment (e.g., extenuating circumstances); determines the appropriate course of action depending on the cause of non-payment and the reputation of the customer; converts the customer's payment plan according to the customer's ability to pay (e.g., has the customer billed by the company); has the customer complete a credit application; and submits the application to the company. Task ID#: 7091831

Resolve a customer complaint about an existing product. To perform this task, the truck delivery salesperson listens to the customer to determine the exact nature of the problem. After asking the customer how the product was used, the salesperson prepares a sample of the batch that caused the complaint and determines whether a problem exists. If there is a problem, the salesperson repeats the process, using new inventory. If a problem exists in the replacement batch, the salesperson checks with the office to determine if there is a problem with the entire inventory of the product. Task ID#: 7091401

Self-Management (F16)

Establish and achieve a yearly sales goal that exceeds the past year's sales. To perform this task, the truck delivery salesperson analyzes the existing territory and the nature of current customer sales and targets expansion opportunities. After determining the new yearly goal, the salesperson breaks it down into subgoals (by the week, the day, and the customer) and plans how to achieve these goals step-by-step. The individual assesses progress at routine intervals and continues to analyze the route for new sales opportunities. Task ID#: 7161401

Integrity/Honesty (F17)

Quote fair prices to the customers. To perform this task, the truck delivery salesperson purchases tools from the company at a fixed price; consults the manufacturer's suggested list price; and quotes the appropriate price to the customer (without adding an additional fee beyond the manufacturer's suggested price). Task ID#: 7171831

Telemarketing Representative (Based on Four Interviews)

Telemarketing representatives conduct telephone surveys and are often responsible for processing and compiling information. They contact people at home or at work, often at random, and promote various services over the telephone; for example, telemarketing representatives may sell advertising space or telephone services, handle billing or credit problems with accounts, or upsell existing accounts.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C12	Exercises Leadership	4.75	.50
C07	Interprets and Communicates Information	4.75	.50
C13	Negotiates to Arrive at a Decision	4.50	.58
C10	Teaches Others	4.25	1.50
C09	Participates as a Member of a Team	4.25	1.50
C05	Acquires and Evaluates Information	4.00	1.41
C08	Uses Computers to Process Information	4.00	2.00
C01	Allocates Time	4.00	1.15
C15	Understands Systems	4.00	1.15
C06	Organizes and Maintains Information	3.50	1.29
C16	Monitors and Corrects Performance	3.50	1.29
C14	Works with Cultural Diversity	3.25	2.06
C17	Improves and Designs Systems	2.50	1.91
C18	Selects Technology	2.25	1.89
C19	Applies Technology to Task	2.00	2.00
C03	Allocates Material and Facility Resources	1.75	1.50
C20	Maintains and Troubleshoots Technology	1.75	.96
C04	Allocates Human Resources	1.25	.50
C02	Allocates Money	1.00	.00

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F05	Listening	5.00	.00
F06	Speaking	5.00	.00
F14	Self-Esteem	4.75	.50
F15	Social	4.75	.50
F13	Responsibility	4.75	.50
F17	Integrity/Honesty	4.50	1.00
F16	Self-Management	4.25	1.50
F07	Creative Thinking	4.25	.96
F11	Knowing How to Learn	4.25	.96
F01	Reading	4.00	.82
F02	Writing	3.75	1.26
F08	Decision Making	3.75	1.26
F09	Problem Solving	3.00	1.41
F12	Reasoning	3.00	1.41
F03	Arithmetic	2.50	1.29
F04	Mathematics	2.00	1.15
F10	Seeing Things in the Mind's Eye	1.50	1.00

Job: Telemarketing Representative

Allocates Time (C01)

Decide upon the length of time to spend on a given sales conversation. To perform the task, the telemarketing representative makes a sales pitch; decides at what point the customer is not likely to purchase the product; terminates the call; and places another call. Task ID#: 8011601

Perform a certain amount of work in each geographical area in a given time period. To perform the task, the telemarketing representative is aware of and tries to achieve or exceed the specified goal per hour of sales. He or she stays aware of talk time and the number of calls made. Finally, the representative listens to the customer to decide when termination of the conversation is appropriate. Task ID#: 8011611

Acquires and Evaluates Information (C5)

Obtain relevant information from customers. To perform the task, the telemarketing representative obtains need or service-related information from customers; accesses and obtains a computer-generated profile of customer information; and evaluates the accuracy of the information and the extent to which it is relevant. Task ID#: 8052321

Interprets and Communicates Information (C07)

Communicate product information to a potential customer. To perform the task, the telemarketing representative knows the details surrounding the product being sold and knows how to explain the details to customers. He or she effectively communicates product information by listening to the customer, being aware of relevant customer cues, and deciding what language to use and how detailed to be when responding to questions. Task ID#: 8071611

Prepare a proposal for a customer. To perform the task, the telemarketing representative collects records of the customer's past telephone bills and writes a proposal comparing the competitor's past bills with an estimated cost for the same services from the representative's company to illustrate the benefits of changing service; graphs the information in order to visually display the communications company's potential offerings and orally presents the results of this research to the customer; and sends written documentation of the research to the customer. Task ID#: 8072331

Uses Computers to Process Information (C08)

Input customer information into the computer. To perform the task, the telemarketing representative uses the keyboard to input changes of address, zip code, or customer name and inputs the correct disposition code (symbolizing the customer's status with regard to the sale). Task ID#: 8081601

Teaches Others (C10)

Model successful telemarketing behaviors to new employees. To perform the task, the telemarketing representative carries out his or her duties in a way that helps new representatives acquire the principles and techniques of successful telemarketing. Task ID#: 8101611

Teach new representatives and others about the industry, the company's competitors, and the company's products and services. To perform the task, the telemarketing representative answers questions about a product or issue; provides a lunch session on a specific topic to help individuals to become knowledgeable and sound informed to customers; provides memos to others about a specific topic area; monitors new employees' telephone calls and offers them information and feedback in order to coach them through calls; offers assistance to new telemarketing representatives in the refinement of their opening sales pitch. Task ID#: 8102331

Negotiate to Arrive at a Decision (C13)

Negotiate with a customer to close a sale. To perform the task, the telemarketing representative convinces the customer of the merits of a particular product, receives resistance from the customer, acknowledges the resistance, and brings out or establishes a need for the product; offers new information to inform the customer of the benefits of the proposed system over that of a competitor's, sharing this information in a way that sparks interest and allows the customer to overcome his or her resistance without losing face. Task ID#: 8132321

Understands Systems (C15)

Aware of information recording responsibilities, including knowing what information to input and how to input it correctly To perform the task, the telemarketing representative familiarizes him or herself with the keyboard and learns how to use the computer system. Task ID#: 8151601

Improves and Designs Systems (C17)

Use customer-generated information about the telemarketing company's competitors to improve the company's products/services. To perform the task, the telemarketing representative recognizes that a customer is supplying potentially useful information on competitor's products or services and relays this information to management for use in the development and improvement of current products or services. Task ID#: 8172321

Applies Technology to Task (C19)

Use the on-line customer information system (OCIS) to research accounts and determine previously purchased products and services. To perform the task, the telemarketing representative identifies needs and recognizes the information that will be useful in addressing the needs; accesses the on-line customer information system by applying the appropriate access commands; knows and applies the commands required to access the master screen for a given customer; and gathers the needed information on past customer services. Task ID#: 8192321

Listening (F05)

Make a sales call to a potential customer. To perform the task, the telemarketing representative calls and makes introductions to potential customer and explains the reason for the call; listens to the customer's questions and comments to uncover any needs or uses for the services or products; decides whether to pursue the call on the basis of the received information and, if the call is pursued, what products will fit the customer's needs; informs the customer what products or services, if any, will meet their needs. Task ID#: 7052331

Speaking (F06)

Try to sell a certain newspaper to a customer. To perform the task, the telemarketing representative introduces himself or herself in order to make the customer feel at ease. Then the representative clearly and specifically describes the nature of the call, including information such as cost or the number of weeks of a subscription. The telemarketing representative listens to the customer's response, addresses any customer concerns, and attempts to close a sale. Task ID#: 7061601

Effectively relay product information to customers. To perform the task, the telemarketing representative greets potential customers and establishes a rapport with them; defines the product being sold; explains how the product would benefit the customer; describes the pricing system; and closes a deal, if possible. Task ID#: 7061611

Creative Thinking (F07)

Assess the best way to convince a customer to buy a product. To perform the task, the telemarketing representative listens to what the customer is saying and how it is being said before deciding how to introduce the product. The representative may alter the words in a ready-made product script in order to make the customer comfortable with the presentation. Task ID#: 7071601

Decision Making (F08)

Make decisions concerning a customer's product or service needs. To perform the task, the telemarketing representative gathers information about a customer to help uncover a potential need; makes suggestions to a customer based upon the obtained information; and offers the product which is best suited to the customer. Task ID#: 7082321.

Knowing How to Learn (F11)

Quickly adapt to new product scripts. To perform the task, the telemarketing representative is adept at reading, comprehending, and retaining scripted product information. The representative knows the material so thoroughly that he or she can change a script in the middle of a presentation without breaking the continuity of the conversation. Task ID#: 7111611

Responsibility (F13)

Deal with customers' inquiries promptly. To perform the task, the telemarketing representative listens to what a customer is saying (e.g., the paper is not arriving on time); decides what can be done to assist the customer by consulting with customer service (e.g., monitor delivery of the paper); and initiates the recommended action immediately. Task ID#: 7131601

Social (F15)

Be personable when dealing with customers. To perform the task, the telemarketing representative talks with customers in a way that makes them feel that the representative is their friend. He or she shows sensitivity to their everyday circumstances, speaks with them politely and empathetically, and presents information sincerely. Task ID#: 7151611

Display a sense of concern and interest in the customer's business and company. To perform the task, the telemarketing representative asks questions about the customer's company and about the contact person's position in the company to become familiar with the potential customer and to show interest above and beyond merely obtaining a sale; makes general ice-breaking conversation in order to befriend the contact person and facilitate a sale. Task ID#: 7152331

Travel Agent (Based on Four Interviews)

Travel agents use published and computer-based sources to obtain information for customers. They provide advice on the best, most convenient travel arrangements according to client characteristics. They also perform promotional services, such as giving slide or movie presentations to groups in an effort to sell trips to individuals and businesses. Travel agents' services vary according to client needs, and include providing information (e.g., on destination, weather conditions, tourist attractions, and international travel requirements) and making arrangements (e.g., for transportation, hotel, car rentals, tours, and recreation).

Competencies		Mean	Std. Dev.
C08	Uses Computers to Process Information	5.00	.00
C11	Serves Clients/Customers	5.00	.00
C01	Allocates Time	4.50	.58
C15	Understands Systems	4.25	.50
C07	Interprets and Communicates Information	4.00	.82
C06	Organizes and Maintains Information	4.00	.00
C13	Negotiates to Arrive at a Decision	4.00	.82
C14	Works with Cultural Diversity	4.00	.82
C05	Acquires and Evaluates Information	4.00	.82
C03	Allocates Material and Facility Resources	4.00	.82
C19	Applies Technology to Task	3.75	.96
C09	Participates as a Member of a Team	3.50	1.29
C04	Allocates Human Resources	3.50	1.29
C16	Monitors and Corrects Performance	3.50	1.29
C12	Exercises Leadership	3.50	1.29
C10	Teaches Others	3.25	.96
C20	Maintains and Troubleshoots Technology	3.25	.50
C17	Improves and Designs Systems	3.00	1.15
C18	Selects Technology	3.00	1.41
C02	Allocates Money	2.75	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F17	Integrity/Honesty	5.00	.00
F13	Responsibility	4.75	.50
F06	Speaking	4.75	.50
F05	Listening	4.75	.50
F01	Reading	4.75	.50
F11	Knowing How to Learn	4.50	1.00
F15	Social	4.25	.50
F16	Self-Management	4.25	.50
F07	Creative Thinking	4.25	.50
F03	Arithmetic	4.25	.50
F12	Reasoning	4.00	.82
F09	Problem Solving	4.00	.82
F02	Writing	3.75	.96
F08	Decision Making	3.50	.58
F14	Self-Esteem	3.50	.58
F04	Mathematics	3.00	1.15
F10	Seeing Things in the Mind's Eye	3.00	.00

Job: Travel Agent

Allocates Time (C01)

Prioritize work tasks on a daily basis to ensure the completion of travel arrangements in a timely manner. To perform the task, the travel agent reviews the work task list at the end of each day; records tasks to be completed the next day on the calendar; prioritizes work tasks by importance each day; and completes ticketing and lodging reservations to meet scheduled deadlines for client. Task ID#: 8011511

Allocates Material and Facility Resources (C03)

Acquire and store travel materials, such as brochures, catalogs, and forms, for subsequent distribution to customers. To perform this task, the travel agent creates/establishes a filing system for travel materials; labels files; orders materials from travel service providers, such as tourist information centers, airlines, hotels, and rental car agencies; files travel materials according to a pre-established system; and retrieves materials from the file as needed and distributes them to customers. Task ID#: 8031881

Uses Computers to Process Information (C08)

Operate a computer terminal to enter, modify, verify, and retrieve travel information. To perform this task, the travel agent receives a request from a customer for information on flight availability, schedules, and costs to specified destination; enters the information on destination and desired dates of travel into the computer terminal to obtain a listing of the desired information; communicates the information displayed on the computer monitor to the customer; and enters specified codes into the computer terminal to book a reservation for the customer on the desired flight. Task ID#: 8081881

Access the computer to review updated travel information, to prepare airline tickets, travel itineraries, and invoices and to revise travel accommodations. To perform the task, the travel agent activates the personal computer; logs on to the computer system; accesses the mainframe; enters data into the computer and retrieves necessary software programs; prepares travel itinerary, airline tickets, and computerized invoices; logs off of the computer at the end of each day; and turns off the personal computer. Task ID#: 8081511

Use the on-line computer terminal to retrieve information relating to the customer's request, plan the itinerary, and book the airline ticket. To perform the task, the travel agent discusses travel plans (destination, travel dates, accommodations) with the customer; retrieves pertinent information on the on-line computer terminal; plans or describes the information to the customer; books the airline ticket and hotel accommodation if the customer is satisfied with the itinerary; and prints out the ticket and itinerary. Task ID#: 8082201

Serves Clients/Customers (C11)

Provide services to customers, such as booking a group for a tour, some of whom are elderly clients. To perform this task, the travel agent counsels travelers on shots, immigration restrictions, and "dos and don'ts" of overseas travel; arranges for special meals and wheelchair arrangements; arranges tours so the elderly do not have to walk too far; makes arrangements so that elderly do not have to carry their own luggage, or be without a telephone in their room; orders international drivers permits, tourist cards, and birth certificates for customers; and informs customers of weather conditions, arrangements for car rental, and sightseeing tours. Task ID#: 8111761

Work with customers of the travel agency to plan and arrange travel services designed to meet their needs. To perform this task, the travel agent talks with and listens to the customer to determine his or her travel needs; discusses travel services available to meet the customer's needs; computes and quotes the costs of travel and lodging; makes lodging and transportation reservations for the customer; and prepares tickets for the transportation or tour package. Task ID#: 8111881

Prioritize a customer's requests in order to satisfy them in a timely manner. To perform this task, the travel agent discusses with the customer all aspects of travel plans, including destination, travel dates, and accommodation needs. Retrieving pertinent information on the on-line computer terminal, the agent describes the information for the customer and discusses plans. If the planning requires much time, the travel agent schedules a walk-in appointment with the customer. The agent takes payment information, books the airline ticket and hotel accommodations when the customer is satisfied with the itinerary, and calls the customer to inform him/her of the ticket deadline and any changes in the itinerary. Task ID#: 8012201

Schedule a flight for a customer. To perform this task, the travel agent retrieves information from the computer to display available flights, checking time and carrier; interprets fares and the rules and regulations accompanying a fare; organizes and presents information to the customer; convinces the customer that the route selected is the best route to take; puts the customer's selection in computer and prints out a copy for the customer; and inputs customer's charge account number into the computer when paying by charge. Task ID#: 8081761

Understands Systems (C15)

Utilize knowledge of the travel industry to provide high levels of customer service. To perform this task, the travel agent reviews travel industry literature to remain knowledgeable of rules and regulations and researches and compiles information on travel service providers, such as wholesale-tour companies, airlines, and rental car agencies. Such information might include services, fares, discounts, and special offers. The agent also attends seminars and "familiarization trips" to enhance his or her awareness of geography and to obtain firsthand knowledge of major tourist attractions, and communicates this knowledge so as to provide customers with the most useful and current information available to meet their needs. Task ID#: 8151881

Monitors and Corrects Performance (C16)

Monitor the performance of other travel agents as well as oneself to ensure that all customers are served in a timely manner. To perform this task, the travel agent monitors other travel agents' performance and suggests alternative routes to enhance itineraries. To protect customers from unpleasant experiences during travel, the agent corrects his or her own mistakes, as well as those of other agents, and contacts customers to inform them of any mistakes or changes in travel. Task ID#: 816220

Process a variety of airline tickets (prepaid, standard, and automated) on new ticket forms instituted by management To perform this task, the travel agent inputs information into the computer and prints out customer's airline ticket; brings computer back up when it goes down, gets it on line, and makes sure printer is working properly so tickets will come out correctly; observes ticket being printed to detect any malfunction; informs management of problem with new ticket form (e.g., the continuous jamming of printer by form because of its thickness); uses hard copy system to print ticket for customer to prevent any delays for customer. Task ID#: 8161761

Selects Technology (C18)

Select the appropriate computer software programs to gather and update information, reserve transportation space, book reservations, and prepare tickets and invoices. To perform the task, the travel agent activates the computer; accesses the mainframe system, retrieves the relevant software programs; reviews and processes information; and prepares travel itineraries and tickets. Task ID#: 8181511

Applies Technology to Task (C19)

Operate two computer systems when making an airline reservation. To perform this task, the travel agent puts final reservation arrangements into an airline's computer, paying attention to details and making sure proper procedures are followed; puts the proper code into computer so that necessary financial data (i.e., ticket cost, commission, account number) is transferred to company computer for accounting purposes and to ensure that the vendor and other accounts are billed for the correct amount; accesses computer to retrieve a variety of information for clients regarding their trips (i.e., weather information, sightseeing tours, currency conversion data, seat availability, fare rules); and issues prepaid tickets through the computer. Task ID#: 8191761

Use the on-line computer terminal to retrieve information relating to the customer's request, plan the itinerary, and book the airline ticket. To perform this task, the travel agent discusses travel plans (destination, travel dates, accommodations) with the customer; retrieves pertinent information on the on-line computer terminal; plans or describes the information to the customer; books the airline ticket and hotel accommodations if the customer is satisfied with the itinerary; and prints out the ticket and itinerary. Task ID#: 8192201

Maintains and Troubleshoots Technology (C20)

Identify and resolve a malfunction in the operation of office equipment. To perform this task, the travel agent detects the faulty operation of office equipment, such as the photocopying machine; views the display window on the control panel of the photocopier to determine the nature of the problem, applying knowledge of diagnostic symbols and equipment operation; reviews the operation manual to troubleshoot the problem; removes the side panel of the photocopier to inspect internal parts, such as the guide rollers or toner container; resolves minor repair problems, such as clearing the path of guide rollers, replenishing toner container, or replenishing the paper tray; consults with equipment repair personnel for resolution of major repair problems; and performs routine preventive maintenance on office equipment. Task ID#: 8201881

Reading (F01)

Read travel brochures, publications, and computer-based information to arrange travel accommodations. To perform the task, the travel agent accesses the computer; retrieves the menu information system; reads updated material on air fares, lodging accommodations, and specially-priced business or leisure packages; reads travel brochures and publications; obtains geographic information regarding travel locations; confers with client to advise of available accommodations; receives approval to book arrangements; prepares travel itinerary; and proofreads copy to ensure correctness. Task ID#: 7011511

Arithmetic (F03)

Plan a customer's vacation trip around available cash. To perform this task, the travel agent ascertains from the customer the amount of money available, the type of vacation desired (foreign or domestic), and the type of things he or she wants to do; determines the number of people to be included in the vacation; searches for vendors that fit the needs of the customer; calls vendors to see if a trip and accommodations are available at the price; calculates the total cost of the trip, based on the price of the trip itself and the commission; invoices the trip for the customer and for accounting, using special codes to put final arrangements into the computer so that the data runs through accounting; collects money from the customer; and gives the customer a receipt, an invoice showing the details of the trip, and airline ticket(s). Task ID#: 7031761

Listening (F05)

Talk on the telephone with a customer to ascertain travel plans. To perform this task, the travel agent talks with the customer to ascertain the specifics of travel plans, such as destination of travel, travel dates, accommodation needs, and method of payment. The agent schedules walk-in appointments with a customer to explain an itinerary, responds to the customer's inquiries, and makes the necessary arrangements. Task ID#: 7052201

Speaking (F06)

Talk with customers to determine their travel needs and to provide information on travel services. To perform this task, the travel agent receives a telephone call from a customer; converses with the customer to determine his or her destination, travel dates, financial considerations, and accommodations required; and discusses travel services available to meet the customer's needs. Task ID#: 7061881

Problem Solving (F09)

Compensate a customer who is dissatisfied with his or her travel experience. To perform this task, the travel agent talks with the customer to determine the nature of the problem; reviews the customer's file to identify the party or travel service provider at fault; contacts a representative from the company at fault to notify them of the customer's complaint; negotiates compensation for the customer with a company representative; and notifies the customer of the compensation offer. Task ID#: 7091881

Knowing How to Learn (F11)

Learn the procedures to retrieve information from the computer-based information system, and to access tour, lodging, flight and train schedules in order to convey information to clients concerning the best travel package. To perform the task, the travel agent receives training on the computer system and on applicable software packages; reads the instruction manual for these systems; accesses computer and software programs; and arranges travel packages for the client. Task ID#: 7111511

Reasoning (F12)

Decide on a vacation plan for the customer based on the information gathered. To perform this task, the travel agent asks questions to determine what customer wants; finds out what customer has done in the past and what he or she wants to do now (e.g., dance, shop, sail); makes suggestions based on the information obtained (such as a cruise if the customer wants to dance and shop); compiles a list of what is available versus what the customer likes and links them together for comparison; shows the customer brochures and a videotape of the cruise; and sets up the cruise for the customer. Task ID#: 7121761

Self-Management (F16)

Make arrangements for regular customers in addition to working with new customers. To perform this task, the travel agent keeps a file of repeat customers and telephones them during slow periods to see if they are planning any trips; makes arrangements for customers to come in, or handles as much of the arrangements as possible over the telephone so that a work-up can be ready when the customer arrives at the agency; makes arrangements for new customers and gives them quality service while handling old customers; completes paperwork for customers and a company in a timely manner to avoid wasting the customer's time and to ensure that the company and its agent get paid. Task ID#: 7161761

Integrity/Honesty (F17)

Exhibit trustworthiness and ethical behavior when handling cash, travel tickets, and other job-related valuables. To perform this task, the travel agent learns or knows company policies and procedures for handling job-related valuables and penalties for violations of these policies; internalizes a commitment to these policies and procedures and to a personal code of ethics against theft; and handles job-related valuables properly and ethically. Task ID#: 7171881

Suggest changes in the itinerary to offer the customer the lowest possible fare, based on available information. To perform this task, the travel agent punches information into the computer terminal to look at different combinations of itineraries and comes up with the lowest fare; contacts different airline carriers to ascertain the availability of special package deals; and suggests to the customer alternate routes, dates, or airline carriers to obtain a lower fare. Task ID#: 7172201

Customer Service Representative (Based on Four Interviews)

Customer service representatives perform account transactions and provide information to customers. They are responsible for responding to customer inquiries, performing data entry, and selling additional services to the customer. They resolve customer complaints and requests for refunds, exchanges, and adjustments, and provide customers with information and materials concerning prices, shipping time, and costs.

Competencies		Mean	Std. Dev.
C11	Serves Clients/Customers	5.00	.00
C14	Works with Cultural Diversity	4.50	1.00
C15	Understands Systems	4.50	.58
C01	Allocates Time	4.50	.58
C09	Participates as a Member of a Team	4.25	.96
C07	Interprets and Communicates Information	3.75	1.89
C10	Teaches Others	3.50	1.29
C19	Applies Technology to Task	3.50	1.29
C06	Organizes and Maintains Information	3.25	1.71
C16	Monitors and Corrects Performance	3.25	1.26
C13	Negotiates to Arrive at a Decision	3.25	1.71
C12	Exercises Leadership	3.25	1.26
C17	Improves and Designs Systems	3.25	.96
C05	Acquires and Evaluates Information	3.00	1.41
C04	Allocates Human Resources	2.50	1.73
C08	Uses Computers to Process Information	2.50	1.91
C03	Allocates Material and Facility Resources	2.25	1.50
C02	Allocates Money	1.75	1.50
C20	Maintains and Troubleshoots Technology	1.75	.96
C18	Selects Technology	1.25	.50

(Results for Foundation Skills on following page)

Foundation Skills		Mean	Std. Dev.
F16	Self-Management	5.00	.00
F15	Social	5.00	.00
F05	Listening	5.00	.00
F13	Responsibility	4.75	.50
F14	Self-Esteem	4.75	.50
F06	Speaking	4.75	.50
F09	Problem Solving	4.50	.58
F17	Integrity/Honesty	4.50	.58
F11	Knowing How to Learn	4.25	.96
F01	Reading	4.00	1.15
F03	Arithmetic	3.75	1.26
F08	Decision Making	3.75	.96
F12	Reasoning	3.50	1.29
F02	Writing	3.25	1.26
F07	Creative Thinking	2.75	.96
F04	Mathematics	2.50	1.29
F10	Seeing Things in the Mind's Eye	2.50	1.91

Job: Customer Service Representative

Allocates Time (C01)

Schedule appointments at intervals sufficient to give enough time to deal with each customer. To perform this task, the customer service representative lists the customer on the itinerary and estimates the time needed for each customer. Using these estimates as a guide, the representative then sets up appointments with customers. Task ID#: 8012131

Manage time efficiently by setting, prioritizing and achieving goals which are important and relevant to the work performance expected by supervisory personnel. To perform the task, the customer service representative makes a list of activities to be completed each day and ranks the activities in order of importance. The representative checks off jobs from the list as they are completed or become irrelevant, and modifies the list if the activities' order of importance changes. The representative is alert to changing demands on his or her time so that time to tasks can be re-allocated and the representative can avoid wasting time. Task ID#: 8011251

Organizes and Maintains Information (C06)

Keep account of clients' historical background, such as service calls. To perform this task, the customer service representative brings up a client's file from the computer database and keys in the specified update on the client's file. The representative continues with the next client until all clients' files are current. Task ID#: 8062131

Interprets and Communicates Information (C07)

Interpret and communicate knowledge about the product or merchandise to the customer. To perform this task, the customer service representative compiles/learns/knows detailed information about the products and merchandise; talks to the customer to determine his or her need for (or interest in) the merchandise; listens to the customer's response; identifies and selects the appropriate information to meet the customer's needs; and talks to the customer to communicate this information. Task ID#: 8071921

Understand and use different manufacturers' price books to choose and order china and crystal. To perform the task, the customer service representative understands and correctly interprets various manufacturers' price books and understands how to complete a special order form. The representative completes the order form and checks it for accuracy and completeness. The special order form is then sent to the department buyer to be reviewed and logged, and sent to the manufacturer to be filled. The representative files a copy of the manufacturer's confirmation of receipt and of the special order form. When the order arrives, the representative uses the information on the order form to contact the customer regarding the purchase. If a problem arises with a special order, the representative refers to either the special order form or the confirmation form to obtain information which would facilitate the resolution of the problem (e.g., data ordered, expected date of manufacture, date of arrival, and specific merchandise). Task ID#: 8071251

Participates as a Member of a Team (C09)

Offer ideas and assistance to colleagues in the department. To perform the task, the customer service representative treats others as he or she would like to be treated and avoids expressing negative remarks about fellow employees or employer to a customer. The representative works as a team member to contribute ideas about a situation, trying to be a part of the solution rather than of the problem. In daily work activities, the representative carries his or her load and assists co-workers who have fallen behind in their assigned duties. For instance, if a co-worker has fallen behind in restocking his or her assigned area, the representative may help with the activity even as a priority over potential sales opportunities. Task ID#: 8091251

Serves Clients/Customers (C11)

Call and set up appointments with customers to help with any problems they might have. To perform this task, the customer service representative sets up an appointment with a customer; meets the customer at his or her business; and listens to the customer's needs and makes the correct response to those needs. Task ID#: 8112131

Assist customers in selecting merchandise or resolving complaints. To perform the task, the customer service representative responds to a customer request for specific merchandise; receives payment for the merchandise and handles the cash or credit card transaction; accepts return merchandise from the customer; listens to reasons for dissatisfaction with the product and records this information; and resolves complaints regarding service or faulty merchandise. Task ID#: 8111451

Communicate and work with customers in order to satisfy their specific needs. To perform the task, the customer service representative listens to customers; understands and identifies their needs; is familiar with the merchandise and knows potential substitutes to requested items; communicates all information to the customer in a positive, helpful, and sensitive manner so that even if the desired merchandise is unavailable, the customer has a positive image of the store. Task ID#: 8111251

Works with Cultural Diversity (C14)

Communicate with and effectively serve customers from a variety of ethnic, social, and educational backgrounds. To perform this task, the customer service representative learns/knows the company's policies for serving all customers equally; internalizes a commitment to these policies and procedures; and works well with co-workers and

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customers from a variety of ethnic, social, and educational backgrounds. Task ID#: 8141921

Understands Systems (C15)

Provide information to customers about the services available throughout the store. To perform this task, the customer service representative learns/knows the company's departmental structure; learns/knows the policies within the various departments; learns/knows how a department's goals relate to company goals; and responds to customer questions, applying knowledge of the company's policies, objectives, and organizational structure. Task ID#: 8151921

Route customers to the proper department or line of authority. To perform the task, the customer service representative receives a customer request or inquiry; analyzes the request, problem, or inquiry and determines appropriate routing destination; advises the customer of the decision; and routes the request to the appropriate authority or store function. Task ID#: 8151451

Applies Technology to Task (C19)

Understand the procedures for operating the cash register to complete a sales transaction. To perform this task, the customer service representative attends a training session on cash register operation; reads the training manual to learn/know cash register operation; and operates the cash register to complete a sales transaction, applying knowledge acquired in training. Task ID#: 8191921

Reading (F01)

Read and interpret the daily "to-do" list. To perform the task, the customer service representative reads the to-do list posted on the customer service desk; follows the instructions on the list and performs specified tasks, such as assembling fixtures, retrieving lay-away items, performing charge transactions, sending items out, restocking shelves, and preparing an inventory list of depleted stock, using coding instructions to ticket and stock merchandise. Task ID#: 7011451

Listening (F05)

Listen to a customer to determine his or her needs. To perform this task, the customer service representative observes a customer shopping in the department; approaches and greets the customer; talks to the customer to determine his or her need for (or interest in) the merchandise; listens to the customer's response; informs the customer about the features of the merchandise; and listens to the customer's response. Task ID#: 7051921

Problem Solving (F09)

Help customers resolve merchandising problems and needs. To perform this task, the customer service representative knows/learns about the merchandise; listens to the customer describe his or her problem; determines possible solutions to the problem; communicates possible solutions to the customer; listens to feedback from the customer; and determines and communicates alternate solutions until the problem is resolved and/or the customer is satisfied. Task ID#: 7091921

Deal with a customer's problem, such as his or her computer not working because it does not have enough memory. To perform this task, the customer service representative listens to the problem and diagnoses it as not enough memory in the computer. The representative then writes up an order on the appropriate form, keys the order into the customer's file in the computer database, and notifies the sales department of the order. Task ID#: 7092131

Knowing How to Learn (F11)

Assemble racks and fixtures to display merchandise. To perform the task, the customer service representative reads instructions and follows schematic drawings for assembly of rack or fixture; assembles rack or fixture, adding brackets; and sets merchandise on rack or fixture to display for sale. Task ID#: 7111451

Responsibility (F13)

Be willing to perform any job assigned and to perform the job with a high level of work ethic. To perform the task, the customer service representative knows his or her job responsibilities and job performance expectations. This includes taking directions from the supervisor regarding his/her expectations with regard to job performance and understanding the duties and responsibilities stated in the formal job description. Drawing from personal resources, the representative observes what needs to be done and completes these activities. He or she also takes on more responsibilities as they are presented and displays self-motivation. Task ID#: 7131251

Assume responsibility for stocking shelves and identifying low stock items. To perform the task, the customer service representative checks the stockroom shelves to inventory available merchandise; cleans the stockroom shelves; straightens merchandise and removes incorrectly placed merchandise from shelves; records item numbers for merchandise to be restocked on appropriate forms; and advises a supervisor of merchandise required to maintain the inventory. Task ID#: 7131451

Social (F15)

Approach, greet, and establish rapport with the customer. To perform this task, the customer service representative observes and acknowledges the customer's presence in the department; approaches the customer in a timely manner; initiates communication with the customer to gain a response; and maintains communication with the customer in a manner that keeps the customer at ease. Task ID#: 7151921

Self-Management (F16)

Organize daily appointments with clients. To perform this task, the customer service representative looks up clients on a computer database and checks on their latest appointment and on what type of equipment they have. The representative then writes up a daily list of clients to contact. Task ID#: 7162131

Appendix

Ratings and Illustrative Tasks for 15 Jobs

Appendix. Ratings and Illustrative Tasks for 15 Jobs

INTRODUCTION

This appendix contains exactly the same kind of information as Chapter 3, except the data are based on the 62 interviews with experts from 15 jobs; the interviews were conducted during Phase 1 of the job analysis. The information is presented separately from Chapter 3 because the organization and definition of the SCANS skills evolved from Phase 1 to Phase 2, due in part to the lessons learned in Phase 1. The title of the two major types of skills were changed: enabling skills in Phase 1 became Foundation Skills in Phase 2, and functional skills in Phase 1 became Competencies in Phase 2. Some skills were dropped or merged with other skills (e. g., "Challenging the Status Quo" was deleted after Phase 1 and part of its content was merged with other skills) and other skills were slightly redefined or reorganized within their area (e. g., three functional skills from Phase 1 dealt with information and three competencies from Phase 2 dealt with information, but the content of the three definitions was modified somewhat between phases and the names of the competencies were changed to reflect the modified content). The functional and enabling skills are listed, by domain, in Tables A-1 and A-2.

As in Chapter 3, the means and standard deviations of the criticality ratings, computed across all interviewees, are presented, as shown in Tables A-3 and A-4. These statistics provide information about the general level of importance of the SCANS skills for the set of 15 jobs studied in Phase 1. As mentioned in the beginning of Chapter 3, the reader should note that some skills are more important than others, and the variance in the criticality ratings across interviewees is indicated by the size of the standard deviations. A larger standard deviation means that the importance of that skill varies more across jobs than does a skill with a lower standard deviation. In addition, the reader should keep in mind that these data only pertain to 15 jobs; use of a larger, different sample of jobs might show different ratings.

Information is also provided for each job, with jobs grouped by the five sectors described in Chapter 1. For each job, a brief general job description is given and the means and standard deviations of the skills are shown. Following these data, illustrative tasks are provided that demonstrate the use of functional skills (competencies). Tasks were not collected for enabling skills (foundation skills) due to time limitations in the interviews. A Task ID number follows each task description. (See Chapter 1 for more detail on the job analysis process.)

Table A-1. Phase 1 SCANS Functional Skills

Resource Management	Manages Time
	Manages Financial Resources
	Manages Material and Facility Resources
	Manages Human Resources
Information Management	Identifies, Assimilates, Integrates, and Evaluates Necessary Information
	Prepares, Organizes, and Maintains Quantitative and Qualitative Records and Information
	Converts Information to Useable Forms
	Interprets and Communicates Information to Others
	Employs Computers and Other Technology for Input and Presentation
Social Interaction	Participates as a Member of a Team
	Teaches Others New Skills
	Serves Clients/Customers
	Influences an Individual or Group
	Negotiates to Arrive at a Decision
	Works With Cultural Diversity
	Questions the Status Quo
Systems Behavior and Performance Skills	Understands How Systems Work
	Anticipates and Identifies Consequences
	Monitors and Corrects Performance
Technology Utilization	Selects Appropriate Technologies
	Uses Machines to Monitor or Perform Tasks of Varying Complexities
	Maintains and Troubleshoots Technologies

Table A-2. Phase 1 SCANS Enabling Skills

Basic Skills	Mathematical Skills
	Writing Skills
	Reading Skills
	Speaking Skills
	Listening Skills
	Reasoning Skills
Intellectual Skills	Creative Thinking
	Decision Making
	Problem Solving
	Representing Information (Mental Modelling)
	Ability to Learn
Affective Skills	Work Orientation
	Self-Confidence
	Sociability
	Cooperation
	Conscientiousness

Table A-3. Means and Standard Deviations of Ratings for All Jobs in Phase 1: Functional Skills (Based on 62 Interviews)

Functional Skills		Mean	Std. Dev.
F12	Serves Clients and Customers	4.10	1.25
F10	Participates as a Member of a Team	4.00	.99
F01	Manages Time	3.97	1.17
F17	Understands How Systems Work	3.74	.97
F15	Works with Cultural Diversity	3.63	1.15
F06	Prepares Information	3.63	1.22
F05	Identifies Information	3.58	1.27
F11	Teaches Others New Skills	3.55	1.07
F08	Interprets Information	3.27	1.31
F09	Employs Computers	3.21	1.57
F19	Monitors and Corrects Performance	3.19	1.50
F13	Influences an Individual or Group	3.16	1.30
F18	Anticipates and Identifies Consequences	3.10	1.22
F21	Uses Machines to Monitor/Perform Tasks	3.00	1.61
F07	Converts Information	2.92	1.47
F14	Negotiates to Arrive at a Decision	2.69	1.10
F22	Maintains and Troubleshoots Technologies	2.52	1.57
F20	Selects Appropriate Technologies	2.47	1.41
F03	Manages Material and Facility Resources	2.47	1.43
F16	Questions the Status Quo	2.23	1.09
F04	Manages Human Resources	1.98	1.25
F02	Manages Financial Resources	1.74	1.21

Table A-4. Means and Standard Deviations of Ratings for All Jobs in Phase 1: Enabling Skills (Based on 62 Interviews)

Enabling Skills		Mean	Std. Dev.
E16	Conscientiousness	4.50	.74
E15	Cooperation	4.45	.76
E05	Listening Skills	4.29	.88
E12	Work Orientation	4.29	.91
E04	Speaking Skills	4.18	1.03
E11	Ability to Learn	4.16	.94
E03	Reading Skills	4.02	1.15
E09	Problem Solving	3.97	.94
E08	Decision Making	3.94	1.08
E13	Self Confidence	3.94	.94
E14	Social	3.85	1.08
E01	Mathematical Skills	3.71	1.14
E06	Reasoning Skills	3.71	1.09
E02	Writing Skills	3.37	1.15
E10	Representing Information	3.19	1.25
E07	Creative Thinking	3.11	1.01

Health and Human Services

Teacher's Aide (Based on Four Interviews)

Teacher's aides reinforce lessons previously taught by teachers and instruct children (one-on-one or in small groups) focusing on the special academic needs of the child. They provide remedial instruction and answer questions posed by the students. Teacher's aides also consult with teachers to formulate lesson plans and to assist teachers in tracking students' progress. They teach children how to care for basic needs (e.g., toilet training) and encourage parents to participate in school activities.

Functional Skills		Mean	Std. Dev.
F11	Teaches Others New Skills	5.00	.00
F13	Influences an Individual or Group	4.50	1.00
F10	Participates as a Member of a Team	4.25	1.50
F08	Interprets Information	3.75	1.50
F01	Manages Time	3.25	1.26
F14	Negotiates to Arrive at a Decision	3.00	1.83
F21	Uses Machines to Monitor/Perform Tasks	3.00	1.83
F18	Anticipates and Identifies Consequences	3.00	.82
F17	Understands How Systems Work	3.00	.00
F15	Works with Cultural Diversity	2.75	1.26
F03	Manages Material and Facility Resources	2.75	1.71
F12	Serves Clients and Customers	2.75	1.71
F19	Monitors and Corrects Performance	2.75	1.26
F06	Prepares Information	2.50	1.29
F05	Identifies Information	2.50	1.29
F20	Selects Appropriate Technologies	2.00	.82
F04	Manages Human Resources	1.75	.96
F07	Converts Information	1.75	.50
F16	Questions the Status Quo	1.67	1.15
F02	Manages Financial Resources	1.50	1.00
F09	Employs Computers	1.50	1.00
F22	Maintains and Troubleshoots Technologies	1.25	.50

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E15	Cooperation	5.00	.00
E03	Reading Skills	4.75	.50
E14	Social	4.75	.50
E04	Speaking Skills	4.50	.58
E09	Problem Solving	4.25	.96
E11	Ability to Learn	4.25	.96
E05	Listening Skills	4.25	.96
E16	Conscientiousness	4.25	.96
E13	Self Confidence	4.25	.96
E12	Work Orientation	4.25	.50
E02	Writing Skills	3.75	.50
E01	Mathematical Skills	3.75	.96
E07	Creative Thinking	3.75	1.50
E06	Reasoning Skills	3.50	1.73
E10	Representing Information	3.50	1.73
E08	Decision Making	3.50	1.73

Job: Teacher's Aide

Manages Time (F01)

Manage several student activities through a timed learning module on "even numbers". In order to perform this task, the teacher's aide first decides on the order and time allotments for the "even number" activities. Then after introducing each activity in turn, the teacher's aide orally drills the class for three minutes on even numbers. After that, the teacher's aide distributes worksheets on even numbers to the class. These worksheets are collected after the specified time period, and the students are then instructed to open their workbooks to specified pages and to complete the related exercises. Task ID#: 010111

Manages Material and Facility Resources (F03)

Assist the teacher in planning which materials will be purchased in order to meet the yearly budget. To perform this task, the teacher's aide meets with the teacher to discuss what materials are needed for instruction and what funds are available. The aide views the catalog with the teacher in order to identify and choose the appropriate materials to order. Task ID#: 030071

Interprets Information (F08)

Interpret the meaning of telephone conversations by the parents of specific students in order to accurately relay the obtained information to the teacher. To perform this task, the aide makes a call to a parent to discuss a specific problem a child may be having. The aide communicates the information to the parent (i.e., child is sick) and obtains information from the parent about how to proceed with the child (i.e., wait with child until parent comes to pick child up). Teacher's aide accurately writes down the parental response and relays the information to the child's teacher. Task ID#: 080071

Reinforce information that students gathered or were given about a social studies reading assignment. To perform the task, the teacher's aide reads the appropriate materials and thus understands the information to be reinforced. The aide then explains the information to the students from the same or a different perspective as was taken by the teacher. Task ID#: 080241

Participates as a Member of a Team (F10)

Share ideas openly on how to achieve a goal (the mission of a recent school improvement day). In order to perform this task, the teacher's aide brainstorms with others and offers his/her opinions about the vision and mission of the school's future.

The teacher's aide then writes down the feedback and results of this brainstorming session. Task ID#: 100061

Consult with the teacher to set up a weekly student instruction schedule. In order to perform this task, the teacher's aide shares with the teacher information about each student's progress. Then the teacher's aide explains what information he/she plans to work on and the progress he/she anticipates. Finally the teacher's aide shares feelings about how she/he wants to progress in instruction. This is usually done by talking about specific students and their anticipated progress. Task ID#: 100111

Teaches Others New Skills (F11)

Teach other paraprofessionals how to use the audio-visual equipment. To perform this task, the aide receives the order from the principal to instruct a new paraprofessional on how to use the equipment. Next, the aide obtains the equipment and visually demonstrates its use and functions. Along with this, the aide verbally explains the equipment's uses and functions and answers any questions posed by the learners. The teacher's aide supervises and monitors the other paraprofessional as he/she demonstrates how to use the equipment. The aide gives verbal feedback to the learner concerning performance. Task ID#: 110071

Enable students to understand the orbits of a pendulum. To perform the task, the teacher's aide identifies the student's performance on the procedures of the pendulum task. The aide may model the appropriate behavior and provide a verbal explanation of appropriate procedures. The aide then answers questions about the procedures and task and keeps students "on task" if they are not doing what is expected. Task ID#: 110241

Teach a "numbers" concept to a small group of children. In order to perform this task, the teacher's aide first decides on a means of teaching the concept (in this case numbers) to the group. Once the teacher's aide has decided upon the means (in this case, counting blocks), he/she demonstrates what the cubes represent. Then the teacher's aide draws the cube on the board to reinforce the concept. The next step is to give examples of numbers and to show how to use the blocks to represent the numbers. The following step is to give the blocks to the children and have them practice representing different numbers. The classroom teacher also asks questions and gives them different numbers to represent to make sure that they understand the concept. Task ID#: 110061

Instruct students on the basics of multiplication. In order to perform this task, the teacher's aide must concretely present the idea of multiplication. The teacher's aide puts the children into rows, and asks them how many children are in each row, asks them how many rows there are, and how many children there are in total. Task ID#: 110111

Handle disruptive students. To perform this task, the teacher's aide understands the implicit need (for attention) of a child who is disruptive. He/she chooses and applies a behavior management technique to try to stop the behavior (e.g., stands next to the child). The aide decides upon the appropriate action to take when the disruptive behavior occurs, based on the nature of the disruption and a knowledge of what techniques are useful for the child in question. For example, the aide may choose to speak to the teacher, keep records of the behavior, or send the child to the principal. Task ID#: 120241

Influences an Individual or Group (F13)

Persuade co-workers to attend a paraprofessional conference. To perform this task, the teacher's aide explains the benefits of the conference to the group verbally and using handouts and brochures detailing the conference. The aide also explains to the group that the system in which they operate (the school system) values and requires such knowledge. Finally, the aide answers any questions raised about the content and the process of the conference. Task ID#: 130071

Keep the students "on task" when they are inattentive. To perform this task, the teacher's aide ascertains why the students are off task by asking questions beginning with, "Do you understand the task?" The aide explains the assignment if the child is off task due to a lack of understanding. The aide offers additional clarification if the individual is still off task. On task behaviors are positively reinforced. Next, the teacher's aide uses persuasion techniques to persuade the student to pay attention (i.e., you are doing this not for me but to learn). Finally, the aide formally reinforces class rules, such as noisy students losing recess time, to convince the student who is still off task to stay on task. Task ID#: 130241

Explain to children the importance of self-control, discipline, and respect. In order to perform this task, the teacher's aide conducts a motivational "rap session" with a group of children to explain the rules which they need to follow at school. Next, the teacher's aide reminds them that these rules apply not only in school but in the real world, and that these rules can help make them successful. The following step is to listen to the students' challenges, questions, and feedback. The last step is to respond to their questions and challenges. This usually entails making sure that the students know that the rules and issues do not change from school to school and that they must conform to these rules. Task ID#: 130061

Help children make decisions, set goals, and pursue the goals. In order to perform this task, the teacher's aide openly reinforces those students who display positive behavior, that is, those who set goals and stick to them. The teacher's aide does not, by contrast, openly reinforce (praise) negative behavior. Task ID#: 130111

Works with Cultural Diversity (F15)

Understand the language and manners of foreign-born students in order to effectively interact with them. To perform this task, the teacher's aide listens to the students' ideas and concerns about their culture in order to understand where their behavior and thoughts originate. Task ID#: 150071

Stress that every student is expected to accomplish goals and tasks. To perform the task, the teacher's aide poses questions and instructs in a gender/ethnic-neutral fashion to emphasize that everyone is expected to accomplish the goals and tasks. Task ID#: 150241

Work with individuals from low socio-economic backgrounds so as to express the fact that you expect them to perform. To perform the task, the teacher's aide models for students the steps in the learning process. The aide chooses the appropriate techniques to help them learn, based on their personalities or specific problems. The aide checks any assignments in order to make corrections, and provides feedback to the students. The aide gives the students a pretest so that they know what they have accomplished toward their goals. Task ID#: 150242

Anticipates and Identifies Consequences (F18)

Separate students who talk or fight with each other. To perform the task, the teacher's aide anticipates, through past behavior or observation, that certain students will talk or fight when seated together. The aide realizes that this is disruptive and either temporarily moves or permanently changes the seat of the disruptive student. Task ID#: 180241

Monitors and Corrects Performance (F19)

Recognize that history from different cultures is not taught in schools and work to correct this problem. In order to perform this task, the teacher's aide first recognizes that African-American history is not integrated into every curriculum. Next, the teacher's aide presents excerpts and facts about this history perhaps on the intercom each morning to attempt to rectify any lack of this history in the curriculum. Then the teacher's aide discusses with the principal whether the curriculum needs to be changed to adequately reflect African-American history, and whether it is possible to gain school-wide approval for needed changes. Finally, the teacher's aide introduces the idea to various organizations in order to stimulate change. Task ID#: 190061

Uses Machines to Monitor/Perform Tasks (F21)

Set up students to do a math activity on a computer. In order to perform this task, the teacher's aide first turns on the computer. Then the aide chooses and inserts the appropriate discs. After that, the teacher's aide accesses the menu and chooses the appropriate task from the menu. Task ID#: 210111

Medical Records Technician (Based on Three Interviews)

Medical records technicians develop systems for record retention and retrieval, ensure that medical records adhere to legal requirements, and ensure the confidentiality of records. They ensure that information from medical records is given only to those with a need to know (e.g., doctors, insurance companies, courts). Medical records technicians code information, such as symptoms, diseases, operations and therapies, for statistical purposes (e.g., billing). They also determine if additional documentation is needed to support the hospitalization of patients.

Functional Skills		Mean	Std. Dev.
F17	Understands How Systems Work	4.33	.58
F01	Manages Time	4.33	.58
F06	Prepares Information	4.33	1.15
F05	Identifies Information	4.33	1.15
F10	Participates as a Member of a Team	4.00	.00
F09	Employs Computers	4.00	1.00
F18	Anticipates and Identifies Consequences	4.00	1.00
F12	Serves Clients and Customers	3.67	1.53
F13	Influences an Individual or Group	3.67	.58
F08	Interprets Information	3.67	1.53
F19	Monitors and Corrects Performance	3.33	2.08
F07	Converts Information	3.33	2.08
F14	Negotiates to Arrive at a Decision	3.00	1.00
F15	Works with Cultural Diversity	3.00	.00
F04	Manages Human Resources	3.00	1.00
F16	Questions the Status Quo	3.00	2.00
F11	Teaches Others New Skills	2.67	1.53
F20	Selects Appropriate Technologies	2.33	1.15
F02	Manages Financial Resources	2.33	1.53
F03	Manages Material and Facility Resources	2.33	1.53
F22	Maintains and Troubleshoots Technologies	2.33	1.15
F21	Uses Machines to Monitor/Perform Tasks	2.33	1.53

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E06	Reasoning Skills	4.67	.58
E04	Speaking Skills	4.33	.58
E02	Writing Skills	4.00	1.00
E03	Reading Skills	4.00	1.00
E09	Problem Solving	4.00	1.00
E08	Decision Making	4.00	1.00
E11	Ability to Learn	4.00	1.00
E15	Cooperation	4.00	1.00
E12	Work Orientation	4.00	1.00
E16	Conscientiousness	4.00	1.00
E05	Listening Skills	3.67	.58
E10	Representing Information	3.67	1.15
E13	Self Confidence	3.33	1.53
E07	Creative Thinking	3.33	.58
E01	Mathematical Skills	3.00	1.00
E14	Social	3.00	.00

Job: Medical Records Technician

Manages Time (F01)

Handle multiple requests for data and reprioritize deadlines. To perform this task, the technician meets with requestor to design the report. Next, the technician fills in the needed form to prepare the report request. The computer is then accessed to design the report, which is then tested to see that it is designed correctly. After the testing, the report is run on the computer. The information found in the report is summarized and analyzed with graphs, etc. If the technician is interrupted during any phase of this procedure, he or she must decide whether to reprioritize the requests or get additional help. Task ID#: 010431

Schedule the coding of medical records to code for high-paying accounts first and to meet quota. To perform the task, the medical records technician identifies large dollar accounts which have been flagged. Next, he or she reads the entire medical record and determines the principal diagnoses and the procedures that were performed. The technician assigns the appropriate codes, which are found in specific code books. Next, he or she enters the data into the hospital computer system and codes other records, as time permits. Task ID#: 010581

Manages Financial Resources (F02)

Develop a departmental budget. In order to perform this task, the medical records technician estimates the resources, supplies, and people needed for the coming year. This means that the cost of resources, supplies and salaries must be estimated. This forecast must be justified in writing. Then the records technician must make adjustments to the budget according to management approval. The last step is to monitor current expenses and resources. Task ID#: 020041

Manages Material and Facility Resources (F03)

Manage the space needed for retention of records. In order to perform this task, the medical records technician first assesses the need for additional space for medical records storage. Next, the records technician assesses the space which is available. The records technician then looks at the length of record retention, based on regulations and on amount of usage. This information, along with budget constraints, is then used to assess options. These options might include microfilm, optical, and off-site records storage. The medical records technician finally oversees the result of the management's decision. Task ID#: 030041

Manages Human Resources (F04)

Assign the staffing to the Medical Records Department. To perform this task, the medical records technician determines the productivity level of the current staff; determines the amount of workload, for example, the number of records to be filled; develops the quality and quantity standards of the workload; determines how long it takes to perform a function; hires staff to meet the established standards. Task ID#: 040041.

Identifies Information (F05)

Clarify or identify the appropriate code for a diagnosis or procedure. To perform the task, the medical records technician reviews the medical record and identifies questions (i.e., insufficient documentation) regarding assignment of a code for principal condition of the patient. The technician then checks a variety of sources for the needed information, including coding manuals, and a coding-clinic pamphlet. The technician discusses the information with the attending physician and retains it in memory. Next, he or she records the code in the medical record and if the code represents a change in departmental procedure, documents that in the hospital's coding manual. Task ID#: 050581

Prepares Information (F06)

Prepare a report of incomplete and delinquent medical records. In order to perform this task, the medical records technician reviews medical records to identify which physician reports need to be completed or signed. This information is then entered into the computer system by physician and type of deficiency. The physician is then notified through computer printouts and letters of deficiency. After this record is processed, it is recorded and reviewed for completeness. Further, the record and/or system is edited and updated when needed. Once the physician report is completed, the record is removed from the system. Summary information is provided, when needed, for medical staff committees. Task ID#: 060431

Maintain disease, operation, and physical index records. In order to perform this task, the medical records technician assigns codes to diseases and procedures, according to the International Classification of Diseases coding system. The records technician then enters these codes into a database. The next step is to retrieve information from the database as needed. This includes determining that records are maintained and that all requests can be fulfilled. Task ID#: 050041

Converts Information (F07)

Prepare length-of-stay graphs with information supplied by a physician. To perform this task, the technician obtains printouts on discharged patients by physician. The technician converts this information to bar-graph format, with length-of-stay on the vertical axis and physician on the horizontal axis. The technician uses this graph to target high length-of-stay cases. Also, the technician analyzes specific cases per physician and assists with justification or non-justification of high length-of-stay cases. Task ID#: 070431

Convert data to usable format for hospitals health care. In order to perform this task, the medical records technician first enters a disease code into a computer to retrieve information. The records technician then retrieves the information (e.g., the number of patients with a certain disease). Lastly, the records technician prepares a report that responds to a requestor's need in an understandable form. Task ID#: 070041

Interprets Information (F08)

Orally present information to groups of physicians regarding documentation of medical records. To perform this task, the technician prepares overheads of information to be presented, gathers samples of medical records to illustrate specific documentation, identifies examples of inappropriate or minimal documentation, and presents all of this information to the group. Next, the technician reviews with the group overheads which explain how minimal/nonspecific Diagnosis Related Group (DRG) documentation affects DRG assignment. The technician compares this with a display of DRG assignment variance based on more specific documentation and on the dollar amounts received for various diagnoses. Finally, he or she answers questions from the physicians. Task ID#: 080431

Employs Computers (F09)

Complete a data abstract on a discharged patient's medical record. To perform this task, the technician first accesses the mainframe database and retrieves the core abstract, which is already in the system. Next, he or she verifies the accuracy of the demographic data against the medical record. The technician then enters the data based upon a series of questions whose answers are found in the medical record. This information is then transferred to the financial system to be added to the patient's bill. The data abstract information is edited as updates and corrections are received. Finally, the technician transmits a quarterly data tape to state databases. Task ID#: 090431

Use computers to graphically present productivity statistics for various sites. In order to perform this task, the medical records technician first collects productivity statistics across sites (e.g., the number of records filed, the number of records pulled, the number of paperwork transactions recorded). Next the records technician creates charts and tables to represent these statistics. Then the records technician presents these results to the administration for staffing and budgeting decisions. Task ID#: 090041

Participates as a Member of a Team (F10)

Contribute ideas for processing the coding of medical records during a backlog. To perform the task, the medical records technician attends a meeting where a group identifies an amount of funding available and many days worth of backlogged records. The technician volunteers solutions and ideas which would help the group to meet its goals. The solutions are implemented (i.e., work weekends and extra hours or alternate work distribution) and follow ups are made to determine if the goals were met. Task ID#: 100581

Teaches Others New Skills (F11)

Train new employees on departmental procedures. In order to perform this task, the medical records technician first assesses the job to be done, for example, the number of records to be coded. The records technician uses written procedures to explain what is to be done and to give standards (e.g., to code 20 records per hour). Next the records technician provides an example of coding, such as where the code goes on the form. The new employee is then given the resources needed (e.g., books, typewriter, materials) and is allowed to code some records. This performance is monitored by the records technician, who determines whether the performance meets the standards. The records technician then gives feedback (either in writing or orally) to the new employee. Task ID#: 110041

Understands How Systems Work (F17)

Understand the impact of one's coding performance. To perform this task, the medical records technician understands the impact of efficiency and accuracy in coding by realizing that coding determines a hospital's reimbursement. Task ID#: 170581

Anticipates and Identifies Consequences (F18)

Release information according to federal and state hospital policies, knowing that a hospital could be sued or held in contempt of court, otherwise. To perform this task, the medical records technician becomes aware of hospital policies (either by looking them up or knowing them). When the medical records technician receives a request for information, he or she reviews it to see if it is written according to policies. For instance, a request has to be addressed to a hospital, signed by a patient, and less than 60 days old to receive a response. The technician prepares a cover letter for certified records and has the medical record reviewed by the assistant administrator of the hospital in case it is to be used for risk management purposes (i.e., sent to an attorney). If an insurance company is the requestor, the technician verifies that it is the patient's primary carrier. Finally, the technician xeroxes a copy of the record and sends it to the requestor. Task ID#: 180581

Monitors and Corrects Performance (F19)

Perform quality assurance by re-abstracting a sample of medical records. To perform this task, the technician first selects a sample of medical records for re-abstracting. This sample is recoded, and reabstracted, and the DRG (Diagnosis Related Group) is reassigned. The new information is compared with previously collected data and errors in original data collection are identified. If errors are found, the technician identifies the reasons, reviews the errors with the person who made them, notes trends in types of errors over a period of time, and recommends appropriate corrective action. Finally, the technician follows up with an audit in the problem areas to determine if there has been improvement. Task ID#: 190431

Registered Nurse (Based on Four Interviews)

Registered nurses coordinate patient treatment plans including physical therapy, changing of dressings, and X-rays. They dispense medication and teach patients preventive care (e.g., proper diet). Registered nurses plan the discharge of patients (e.g., arrange for some hospital patients to go to a nursing home). They make home visits to patients and do physical assessments of patients (including taking pulse, blood pressure).

Functional Skills		Mean	Std. Dev.
F08	Interprets Information	5.00	.00
F01	Manages Time	4.75	.50
F05	Identifies Information	4.75	.50
F12	Serves Clients and Customers	4.75	.50
F21	Uses Machines to Monitor/Perform Tasks	4.50	1.00
F06	Prepares Information	4.50	1.00
F10	Participates as a Member of a Team	4.25	.96
F07	Converts Information	4.00	2.00
F11	Teaches Others New Skills	4.00	.82
F15	Works with Cultural Diversity	4.00	1.15
F20	Selects Appropriate Technologies	3.75	1.26
F22	Maintains and Troubleshoots Technologies	3.75	.96
F17	Understands How Systems Work	3.50	1.29
F18	Anticipates and Identifies Consequences	3.50	1.29
F13	Influences an Individual or Group	3.50	.58
F19	Monitors and Corrects Performance	2.75	.96
F14	Negotiates to Arrive at a Decision	2.75	1.26
F09	Employs Computers	2.75	1.71
F16	Questions the Status Quo	2.50	.71
F03	Manages Material and Facility Resources	2.25	.96
F04	Manages Human Resources	2.00	1.15
F02	Manages Financial Resources	1.75	.96

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E16	Conscientiousness	5.00	.00
E09	Problem Solving	4.75	.50
E05	Listening Skills	4.75	.50
E02	Writing Skills	4.75	.50
E08	Decision Making	4.75	.50
E14	Social	4.50	1.00
E15	Cooperation	4.50	1.00
E12	Work Orientation	4.50	.58
E11	Ability to Learn	4.50	.58
E03	Reading Skills	4.25	.50
E13	Self Confidence	4.25	.50
E04	Speaking Skills	4.25	.96
E01	Mathematical Skills	3.75	.96
E06	Reasoning Skills	3.75	.50
E07	Creative Thinking	3.50	.58
E10	Representing Information	3.25	.50

Job: Registered Nurse

Manages Time (F01)

Schedule patient treatment/activities in order to complete them in an appropriate time frame. To perform this task, the registered nurse first assesses the patient, with tools such as a stethoscope, blood pressure cup, thermometer. Next, he or she identifies patient needs and prioritizes these needs, which may include medication, treatments, and certain procedures. The nurse prepares a schedule for the patient's activities (i.e., which technician is responsible for which activity) and coordinates/plans the patient's discharge needs and plan of care. Task ID#: 010031

Prepare a patient in time for surgery, given the nurse has a number of patients in his/her care. To perform the task, the registered nurse ensures that the operative permit is signed and in order in time for the operation. He or she removes any jewelry/dentures worn by the patient and ensures that any preoperative medicine is given and that other preparations are done, within 15 minutes prior to surgery, including, for example, washing the skin with antiseptic fluid. Finally, the nurse ensures that all of the necessary lab work is completed. Task ID#: 010441

Schedule home visits efficiently with respect to geographic location and time. To perform this task, the registered nurse first receives a clinic schedule one month in advance. Next, he or she decides which homes to visit, basing the decision on the seriousness and type of disease and the convenience of the home to the clinic being visited. The registered nurse then plans the home visits so as to minimize travel time. Task ID#: 010621

Identifies Information (F05)

Look up procedures in the Patient Care Policy Manual. To perform the task, the registered nurse identifies the relevant topic area by title, finds the appropriate policy number, and looks up the procedure under the policy number. Task ID#: 050441

Admit a patient into the hospital. To perform the task, the registered nurse conducts a data base interview of routine questions and identifies problems using the baseline data for diagnosis. The nurse next discusses with the patient the goal of the stay and establishes short- and long-term time frames for goal accomplishments (i.e., patient will not have a fever in three days). He or she conducts nursing interventions to achieve the goal and evaluates the accomplishment of the goal or possible goal revisions. Task ID#: 050051

Consult material to learn about a disease process and/or the proper procedures for dealing with the disease. To perform this task, the registered nurse looks in medical references to learn about a disease process (e.g., symptoms, side effects of a particular drug, disease symptoms) with which he or she is not familiar. References include state regulations regarding immunization schedules, medical books (e.g., the Physician's Desk Reference), memos, and health department regulations. Task ID#: 050621

Prepares Information (F06)

Prepare patient care plans (charts). To perform this task, the registered nurse transcribes the physician's orders into a plan of care for the patient. He or she prioritizes the orders to indicate order of performance (e.g., medicine, IV). Next, the nurse assesses the patient using a four-page form called a database (which includes patient information such as medical history) and designs a nursing plan of care. Task ID#: 060031

Chart a patient's progress, including maintaining and updating progress notes. To perform the task, the registered nurse documents the patient's problem(s) on a nursing diagnosis form which includes the following types of data: 1) subjective - what the patient says (e.g., patient's leg feels numb), 2) observed - laboratory results and what the nurse sees (e.g., patient's foot looks blue), 3) assessment - nurse's interpretation of the data (e.g., cast is too tight). Finally, the nurse charts the plan of action, to deal with the problem(s). Task ID#: 060051

Converts Information (F07)

Transcribe doctor's orders (both written and oral). To perform the task, the registered nurse transfers the doctor's orders onto a patient care plan and verifies the accuracy of the orders with the doctor after the transcription is complete. The nurse enters laboratory results, medications, and other relevant procedures into the computer. Finally, the doctor's orders are signed and a copy is sent to the pharmacy. Task ID#: 070051

Graph onto the growth chart height and weight information. To perform this task, the registered nurse collects information on an infant's height and weight and places the figures on a preprinted growth chart, which shows where the baby fits on curve for normal growth pattern. Task ID#: 070621

Interprets Information (F08)

Interpret and communicate changes in patient's condition to the physician. To perform the task, the registered nurse detects changes in a patient's blood pressure, pulse, temperature, etc., and communicates these to the physician who gives orders accordingly. Task ID#: 080441

Report on the patient's condition to other nurses at the end of a shift. To perform the task, the registered nurse identifies which nurse will be replacing him or her and discusses diagnosis, treatments, and medications with the relief nurse, using the patient's chart. The nurse also communicates the patient's history, present condition, and any future orders or plans and interprets the patient's needs with the other nurse who may have noticed different symptoms. Task ID#: 080051

Participates as a Member of a Team (F10)

Confer with team members about how to handle difficult patients. To perform this task, the registered nurse identifies a difficult patient, plans a meeting with the team, discusses the problem with team members, and discusses the results of the team's resolution of the problem. Task ID#: 100031

Share patient information with colleagues. To perform the task, the registered nurse, after completing a database on a patient, realizes that the patient did not provide certain information about his or her past history. The nurse asks another nurse to get the information, and the nurses exchange the necessary information. Task ID#: 100441

Participate in planning the discharge of a patient. To perform the task, the primary registered nurse discusses discharge planning with the social worker, including where the patient will reside upon discharge, who will provide care for the patient, etc. Further, if appropriate, the nurse has on-going discussions about the patient's progress with physical therapy staff, with the doctor, with family members and with the patient him/herself. Task ID#: 100051

Teaches Others New Skills (F11)

Instructed trainee in the use of new equipment. To perform the task, the registered nurse orients the trainee to the equipment in the unit (e.g., suctions, cardiac monitors) and demonstrates how to operate the equipment. Next, the nurse instructs the trainee in how to set up the equipment and uses a checklist to record and check off the trainee's skill in using the equipment. Task ID#: 110031

Conduct an in-service seminar to inform others about catheters and infection rates. To perform the task, the registered nurse brings him/herself up-to-date on the latest information about catheters and infection rates and then instructs nurses in how to insert catheters and how to prevent infection, for example, by illustrating ways to improve changing dressings. Task ID#: 110441

Teach a patient how to administer medication. To perform the task, the registered nurse identifies the patient's current level of understanding on the subject (this may include knowing the patient's reading level). From this information, the nurse selects the appropriate method of teaching (i.e., flashcards for those who can't hear, tape recordings for those who can't see, videotapes). He or she describes the importance of the medication and how it should be taken, instructs the patient on correct dosage and frequency of administration, and explains potential side effects. Task ID#: 110051

Serves Clients/Customers (F12)

Deal with a patient complaint/request concerning medication. To perform the task, after receiving a complaint from a patient that his or her pain medication is late, the nurse explains to the patient that the delay was a result of an error in charting. The nurse then apologizes to the patient, administers the medication, and calls the supervisor, if necessary. Task ID#: 120441

Respond to a patient's complaint about his/her diet. To perform the task, the registered nurse listens to the patient's complaint and provides a menu for the patient to use in food selection. The nurse calls the dietary department to make sure that foods selected are compatible with the dietary orders. He or she may refer the patient to the dietician or suggest that family members bring in meals which are consistent with the dietary orders. Task ID#: 120051

Works with Cultural Diversity (F15)

Meet patients' spiritual needs. To perform the task, the registered nurse informs the patient when services are held. He or she also informs the patient that services can be watched on videotape and that a chaplain is available for private visits. Task ID#: 150051

Make home visits in neighborhoods of other cultures. To perform this task, the registered nurse speaks the language of that culture to patients to facilitate communication. Also, the registered nurse is familiar with the culture and why patients have certain habits and attitudes. This helps the registered nurse to understand why certain behaviors that can lead to disease, alcohol addiction, pregnancy, etc., are accepted. Task ID#: 150621

Selects Appropriate Technologies (F20)

Select the appropriate size of needle for an intravenous drip (IV). To perform the task, the registered nurse assesses the size of the patient's veins. He or she obtains the proper size of needle according to the vein size and the fluid to be infused (blood requires a large needle, while other fluids may use a smaller one). Task ID#: 200051

Uses Machines to Monitor/Perform Tasks (F21)

Perform hemodynamic monitoring. To perform the task, the registered nurse calibrates the monitoring machine and then interprets machine output. (The machine gives measures of pressures in the heart, lungs, etc.) The nurse detects any errors in catheter insertion and reports these to the physician. Task ID#: 210441

Office, Financial Services, Government

Bank Teller (Based on Five Interviews)

Bank tellers serve customers by cashing checks, depositing money into various accounts, and helping the customer with financial services (e.g., issue cashiers checks, travelers checks, money orders, and certified checks). Tellers also receive payments (e.g., for utility and telephone bills). They sell and buy foreign currency, handle access to safe deposit boxes, sell government securities and bonds. Tellers also balance funds (debits and credits) daily.

Functional Skills		Mean	Std. Dev.
F12	Serves Clients and Customers	4.80	.45
F10	Participates as a Member of a Team	4.60	.89
F17	Understands How Systems Work	4.00	1.00
F15	Works with Cultural Diversity	4.00	.71
F07	Converts Information	3.20	2.05
F09	Employs Computers	3.20	2.05
F11	Teaches Others New Skills	3.00	1.22
F13	Influences an Individual or Group	3.00	1.58
F08	Interprets Information	3.00	1.22
F21	Uses Machines to Monitor/Perform Tasks	3.00	1.87
F06	Prepares Information	2.80	1.79
F19	Monitors and Corrects Performance	2.60	1.82
F05	Identifies Information	2.40	.55
F01	Manages Time	2.40	.89
F14	Negotiates to Arrive at a Decision	2.40	1.67
F04	Manages Human Resources	1.80	1.10
F16	Questions the Status Quo	1.80	1.30
F18	Anticipates and Identifies Consequences	1.80	1.10
F22	Maintains and Troubleshoots Technologies	1.60	.89
F03	Manages Material and Facility Resources	1.40	.89
F20	Selects Appropriate Technologies	1.40	.55
F02	Manages Financial Resources	1.20	.45

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E16	Conscientiousness	5.00	.00
E15	Cooperation	4.80	.45
E04	Speaking Skills	4.60	.89
E05	Listening Skills	4.60	.55
E12	Work Orientation	4.60	.89
E13	Self Confidence	4.40	.89
E14	Social	4.40	.89
E11	Ability to Learn	4.40	.55
E01	Mathematical Skills	4.20	.84
E03	Reading Skills	4.00	1.00
E06	Reasoning Skills	3.80	1.30
E09	Problem Solving	3.60	1.14
E08	Decision Making	3.60	1.52
E02	Writing Skills	3.20	.84
E07	Creative Thinking	3.00	1.41
E10	Representing Information	2.40	.89

Job: Bank Teller

Prepares Information (F06)

Complete a currency transaction report. In order to perform this task, the bank teller first determines if the transaction is reportable. Then the bank teller obtains the currency transaction report form and requests the necessary information from the customer, such as name, address, social security number, individual accounts, etc. The teller completes the form, obtains the customer's signature, and submits it to the manager for review. Task ID#: 060211

Place a teller hold on a check to be cashed. To perform this task, the bank teller receives the check from the customer and enters the checking account number into the computer. The teller asks the customer for identification and records this information on the back of the check. Then, he or she enters the cash hold, the amount of the check, and validation data into the computer. The bank teller than places the check into the validator. He or she enters the amount of the check into the calculator, withdraws the amount of cash from the box, and counts it for the customer. The teller then places the check in the cash check sort box. Task ID#: 060331

Converts Information (F07)

Deposit cash or checks into customer's savings account. To perform this task, the teller receives cash and/or checks and savings account deposit slip from customer. The teller enters the account number and the amount of the deposit into the computer using menu-driven software. The bank teller validates the "in ticket" by placing ticket and deposit slip into validator. He or she keeps the original and gives a copy of the in ticket to the customer. The teller places the original and a copy of the in ticket in the commercial sort box and thanks the customer. Task ID#: 070331

Record pertinent information about a bank robbery that has just occurred. In order to perform this task, the bank teller (after having recovered from the experience), goes to the immediate supervisor without mentioning the incident to anyone else. The teller calmly obtains and completes the identification form and then gives a full report to the police and the FBI, when they arrive. The report is then given to the bank's security officer. Task ID#: 070211

Interprets Information (F08)

Provide information (e.g., checking account balance) to a customer over the telephone. To perform this task, the teller answers the telephone and listens to the inquiry. The teller determines if the checking account balance inquiry is made by a known customer and signs onto the computer. The teller then enters the account number on the computer and tells the customer the balance over the telephone. After thanking the customer, the teller exits from the screen and concludes the conversation. Task ID#: 080331

Employs Computers (F09)

Use the computer to balance funds at the end of the business day. To perform this task, the teller obtains a paper balance sheet, counts all cash in the drawer by domination, and records information on the balance sheet. Teller selects a "teller settlement" from the computer menu and enters the cash count by denomination into the computer. The computer then gives the balance data back to the teller and the teller selects "in balance" from the menu. Next, the teller puts the data from the computer onto a balance sheet and has the computer print the total. The computer also prints cashed check summary on the cash-out ticket. Teller counts the checks and bundles all work. Finally, teller logs out. Task ID#: 090341

Go to the bank branch's terminal screen to retrieve necessary information, when the teller's terminal goes down. In order to perform this task, the bank teller first signs onto the branch system to access levels of authority. Then the teller determines what file to use in the system. Utilizing the inquiry screen to find the location of necessary information, the teller retrieves the information and obtains a printout of it. Task ID#: 090211

a cash investment onto a computer. To perform this task, the teller listens to a
er asking if a deposit has been made to his/her account. The teller enters the
r information into the computer. Then the teller reads the account information to
customer and prints data onto the validator. The teller thanks the customer and exits from the screen. Task ID#: 090331

Participates as a Member of a Team (F10)

Help a co-teller whose drawer is out of balance at the end of the day find the error so that all can leave at a given time. To perform this task, teller A realizes his or her drawer is out of balance. Tellers B and C come over to assist teller A. Teller B recounts the cash while teller C checks deposit slips and validation work. Two additional tellers perform the additional duties of balancing the office checks for tellers A, B, and C. Teller B finds the cash error and corrects the balance sheet while teller A makes the correction on the computer. Finally, teller A finishes the end of day balance and tellers A, B, and C relieve their co-workers of the additional duties. Task ID#: 100341

Prepare for a branch audit. In order to perform this task, the bank teller must first provide the supervisor access to the money drawer. The teller observes the supervisor as part of a dual control procedure with the drawer audit. He or she then works with other tellers to audit the night deposit report and the vault report. Task ID#: 100211

Answer a customer's question (wants to know when the last deposit was made in the account). To perform the task, the bank teller keys the account number into the computer, goes to the accounts menu, and obtains a transaction history. He or she searches by check number or dollar amount. (The teller can call banking services for information, if necessary.) He or she views the teller tapes and also asks if the customer has a receipt which would aid in the search. Task ID#: 120101

Provide information on bank services to customers. To perform this task, the teller listens to the customer's request for savings and/or checking account information. The teller obtains the appropriate brochures for the customer and explains about the various banking programs. When the customer is satisfied with the information provided, the teller thanks the customer. Task ID#: 120331

Teaches Others New Skills (F11)

Help a new teller learn how to do a money order. To perform the task, the bank teller goes to the money order machine and takes out the log book. He or she shows the trainee how to log in the money order which involves recording the date, amount, teller's initial, and number. Next, the teller shows how to cut the check and which copies go to the customer. Finally, the teller shows the trainee how to process the order in the teller machine. Task ID#: 110101

Teach a trainee how to run a vault. To perform this task, the senior teller orients the trainee to the vault layout (e.g., forms, money). The senior teller demonstrates how to band money into bricks and how to properly stack the bricks. The trainee practices counting money in the vault and records the date. The senior teller then teaches the concept of buying and selling vault tickets. He or she also shows the trainee how to sign onto the vault by computer and supervises the trainee's use of the validator to buy and sell vault tickets. The teller demonstrates how to enter data onto the computer to determine the vault balance and how to run tape and compare the tape to the balance shown on the computer. The teller explains that the completed balance sheet must be approved and signed by a supervisor. Task ID#: 110331

Serves Clients/Customers (F12)

Verify that a check has been paid against an account. To perform this task, the teller greets the customer and listens to the request (in this case, that the customer needs to know if a check he or she has written has been cashed). The teller obtains the customer's account and check number. Next, the teller enters the data into the computer and selects the proper item from the menu. Teller obtains the needed information and relays it to the customer. Finally, the customer thanks the teller and the teller exits the computer screen. Task ID#: 120341

Assist a customer who wants to obtain money in a manner which is contrary to company policy. To perform this task, the bank teller explains to the customer the procedure for cashing checks drawn on another bank. The teller then asks if the customer has an automated teller machine (ATM) card with which to withdraw the needed cash and if he or she wants to deposit the check. If they have a major credit card, they can get a cash advance. Finally, if the issue is still not resolved, the teller defers to the manager. Task ID#: 120171

Help an irate customer reconcile his/her statement with their records. In order to perform this task, the bank teller first calms the customer. After having done this, the teller goes to the branch terminal and logs on to find the customer's file. The teller then obtains a print-out of the branch's statement and compares it to the customer's records. Once the problem is located, the teller contacts the supervisor with the appropriate records. Task ID#: 120211

Works with Cultural Diversity (F15)

Explain to a foreign student how to use the computer software. To perform this task, the teller trainer is informed by the student that he or she has a problem understanding the software's instructions. Teller then verbally re-words the paragraph which is not understood. Task ID#: 150341

Serve customers who appear beyond the normally accepted patterns of dress and behavior. In order to perform this task, the bank teller provides the customer with the normal service as needed, regardless of his or her appearance or behavior. This involves refraining from making judgements and from allowing the behavior to influence the quality of service provided. Task ID#: 150211

Serve customers who speak another language. To perform the task, the bank teller attempts to communicate by using gestures, or may get the foreign currency teller to help. He or she asks questions and carries out the actions. Finally, the transaction is performed. Task ID#: 150101

Questions the Status Quo (F16)

Recommend changes to normal procedures by refusing to cash a large check for someone whose previous record indicates that they are a liability to the bank (based on previous information). In order to perform this task, the bank teller first observes the situation. Then the teller recalls the customer's previous record. The teller brings this knowledge to the supervisor's attention and recommends a break of normal procedures to safeguard the bank. Task ID#: 160211

Understands How Systems Work (F17)

Perform a proof order operation where the customer wants cash back. To perform this task, the teller must understand the procedures for the action. The customer informs teller that he or she would like to make a deposit into the checking account with cash back. The teller inspects the check for negotiability and validity and checks deposit slip for accuracy. Next, the teller enters the data into the computer, creates a cash-out ticket on the computer, and prints cash-out and deposit tickets. The teller then places the items in the proper proof order, and then into the sort box. Finally, the teller removes the cash from the box, gives cash and receipt to the customer, and clears the computer screen. Task ID#: 170341

Request the appropriate identification in order to cash a check. To perform the task, the bank teller scans the amount of the check. He or she knows that if the amount is less than $500.00, one form of identification is needed; if the amount is greater than $500.00, two forms are required. If the amount is over $500.00 and the customer has only one form of identification, the teller checks for stop-payment on that check or verifies the signature card of the customer. If the issue is not resolved, the teller refers the customer to the supervisor. Task ID#: 170171

Serve a customer who asks for information on the Community Re-investment Act file. In order to perform this task, the bank teller escorts the customer to the manager's desk and then obtains the Community Re-investment Act portfolio. The teller explains to the customer how the CRA works and refers the customer to the CRA officer, if necessary. Task ID#: 170211

Handle a customer's request for a $1,000 money order. To perform the task, the bank teller must know and relay to customer that they cannot give money orders in denominations over $500.00. He or she explains other possible options, such as a cashier's or a certified check. Task ID#: 170101

Monitors and Corrects Performance (F19)

Identify a computer data entry error and make corrections. To perform this task, the teller identifies a data entry error during a deposit transaction. He or she enters the electronic journal to make changes. The teller enters the sequence number of the transaction, presses the "shift rev" key, and re-enters the data. Finally, he or she exits the electronic journal. Task ID#: 190341

Uses Machines to Monitor/Perform Tasks (F21)

Check the computer to ensure that all of the off-line items have been received by the "host" computer. To perform the task, the bank teller enters the proper code on the computer menu and proceeds to check the day's activities of the branch station. He or she completes a computer balance of the events of the day and prints any outstanding actions. Finally, the teller sends the printout to operations for action. Task ID#: 210341

Use teller machines to make deposits. To perform the task, the bank teller accepts the checks and deposit slips from the customer. He or she then selects the appropriate menu on the computer, keys in the correct deposit amount, and transmits the information into the teller machine by hitting the enter key. Next, the teller inserts the deposit slip and then the receipt and finally gives the customer the receipt. Task ID#: 210171

Re-program tapes for machines in branch at teller terminals. In order to perform this task, the bank teller first removes the old cassette. Then the teller places the programming cassette into the first drive and a new tape into the second drive. Next, he or she copies the program cassette onto the new tape. The teller rewinds both tapes, removes the programming tape from the first drive, and then installs the newly programmed tape into the first drive. Task ID#: 210211

Secretary (Based on Four Interviews)

Secretaries typically create products that communicate information. This includes typing letters and documents, formatting them into a presentable form, and assembling reports. Other aspects of the job include xeroxing documents, answering telephones, maintaining files, keeping his or her supervisor's schedule (deadlines and meetings), acting as a liaison between managers, and setting up meetings.

Functional Skills		Mean	Std. Dev.
F10	Participates as a Member of a Team	5.00	.00
F01	Manages Time	4.75	.50
F12	Serves Clients and Customers	4.50	.58
F09	Employs Computers	4.50	.58
F05	Identifies Information	4.25	.50
F06	Prepares Information	4.25	.50
F15	Works with Cultural Diversity	4.00	.82
F17	Understands How Systems Work	3.75	.50
F07	Converts Information	3.75	1.26
F08	Interprets Information	3.25	.50
F11	Teaches Others New Skills	3.25	1.26
F19	Monitors and Corrects Performance	3.00	.82
F03	Manages Material and Facility Resources	3.00	.82
F13	Influences an Individual or Group	3.00	1.41
F14	Negotiates to Arrive at a Decision	3.00	.82
F18	Anticipates and Identifies Consequences	3.00	.82
F02	Manages Financial Resources	2.50	1.73
F20	Selects Appropriate Technologies	2.50	1.29
F21	Uses Machines to Monitor/Perform Tasks	2.00	.82
F22	Maintains and Troubleshoots Technologies	1.75	.50
F16	Questions the Status Quo	1.50	.58
F04	Manages Human Resources	1.25	.50

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E05 Listening Skills	5.00	.00
E02 Writing Skills	5.00	.00
E15 Cooperation	5.00	.00
E04 Speaking Skills	4.75	.50
E03 Reading Skills	4.75	.50
E12 Work Orientation	4.75	.50
E16 Conscientiousness	4.75	.50
E08 Decision Making	4.50	.58
E11 Ability to Learn	4.50	.58
E13 Self Confidence	4.00	.82
E14 Social	4.00	.82
E09 Problem Solving	4.00	.82
E06 Reasoning Skills	4.00	.00
E07 Creative Thinking	3.25	.50
E10 Representing Information	3.00	1.15
E01 Mathematical Skills	2.75	.96

Job: Secretary

Manages Time (F01)

Organize time to work on high priority tasks. To perform this task, the secretary logs onto the computer. Next, secretary notes what needs to be done first and begins to work on the most critical item. When completed, the task is turned in and the next task is started. Secretaries also employ other strategies to manage time, including: working on other tasks while the priority task is being reviewed and postponing or skipping lunch in order to complete a task. If more than one critical item needs to be completed, the secretary obtains the supervisor's priority ranking of items to be completed. The secretary must communicate to other individuals who may be expecting to receive a product the fact that priority work must be completed first. Task ID#: 010351

Prioritize one's own activities according to the manager's preferences, external environment, target dates, etc. To perform the task, the secretary makes a list of the activities to be completed. He or she readjusts the schedule on the basis of incoming priorities. Finally, he or she checks off completed activities. Task ID#: 010091

Coordinate the flow of meetings in a conference room so that they end on time and do not overflow into later meeting times. To perform this task, the secretary prepares a meeting agenda with time estimates to be followed. During the meeting, the secretary takes notes and pays attention to the passage of time for each agenda item. Near the end of the time limit specified on the agenda for a certain portion of the meeting, the secretary indicates to the meeting chairperson that the time allotted for that part of the meeting has expired. Task ID#: 010191

Manages Financial Resources (F02)

Prepare funding profiles on research proposals. To perform this task, the secretary retrieves relevant data on the name of the researcher, and the proposed amount of funds requested; retrieves the funding profile template from the computer; fills in the necessary information on the computer template concerning required funds (i.e., the monetary information is transferred from the proposal to the computer); prints document from the computer and gives it to the manager for verification of figures and his/her signature. Task ID#: 020191.

Manages Material and Facility Resources (F03)

Prepare bulk proposals for shipment to another agency. To perform this task, the secretary prepares folders (i.e., with file labels) and files relevant proposal materials in them. The secretary then stores these folders for a specified time period (depending upon deadlines) and retrieves them at the designated time. The secretary categorizes and stores the folders in boxes according to subject matter, and prepares the boxes for shipment by labelling them according to subject matter, and indicating the number of each box (e.g., 1 of 12). The secretary then coordinates the shipment of materials to another agency by calling another person to remove the materials or he or she carries them to the designated location him/herself. Task ID#: 030191

Identifies Information (F05)

Search for and retrieve information from multiple sources. To perform the task for an insurance company, for example, the secretary obtains information from reports from the corporate office. He or she then obtains loss ratios of agencies for various lines (auto, property, homeowner), and policy projection reports that include the number of policies in force for each line of each agency to evaluate. He or she then obtains relevant information from departmental managers, internal expense reports, and branch reports by kind code (entertainment, schooling, compensation). Finally, the secretary obtains claim reports of large losses by each agency. Task ID#: 050091

Utilize available sources and documentation to prepare a research contract. To perform this task, the secretary obtains correspondence from the individual who is requesting a contract. Then, the secretary retrieves the manuals pertaining to contracting services from his or her own office or from that of others, reviews the manuals to retrieve appropriate regulations, reviews the regulations to identify the appropriate procedure, and extracts the needed information. The secretary then retrieves previous correspondence, such as the proposal and letters concerning the subject of the contract. He or she prepares the contract by integrating procedural and subject matter information onto the contract form. Task ID#: 050191

Identify customers who are overdrawn and resolve the problems. To perform the task, the secretary in a bank checks the computer overdraft report and calls the customer to notify him or her that they are overdrawn. Next, on direction from the bank manager, the secretary can either withdraw money from another account or transfer funds from another bank electronically. Finally, the secretary applies overdraft charges and enters the information into the computer. Task ID#: 050081

Prepares Information (F06)

Set up documents and tables for reports. To perform the task, the secretary formats the document according to the supervisor's outline, types information in tables, and proofreads the document. Following this, the secretary prints out the document, checks again to ensure appropriate formatting, and gives it to the supervisor for review. Finally, the secretary makes any required changes. Task ID#: 060091

Maintain and organize a "desktop" (computerized storage of information). To perform this task, the secretary turns on the computer and interprets and arranges files and folders on the computer according to subject content or other relevant categories. Then, the secretary reviews the data in the relevant files on the computer. He or she accesses the relevant files, reads them on the screen, or prints out the information. Task ID#: 060191

Prepare monthly reports to monitor deposits and loans. To perform the task, the secretary in a bank establishes a format of deposits and loan reports, including setting tabs for tables and generating and typing formula on a spreadsheet. The secretary next gathers bank reports and extracts information, as directed. He or she then performs calculations (addition, percentages), proofreads the report, and distributes the report to branch managers. Task ID#: 060081

Converts Information (F07)

Create a view graph for a briefing from data found on a previously prepared form. To perform this task, the secretary turns on the computer and retrieves a previously prepared form. Then, the secretary accesses a blank view graph from the desktop computer system and copies the relevant data from the form to the view graph, modifying the view graph by enlarging letters, inserting bullets, changing the font, inserting borders, etc., as necessary. The secretary prints the graph on a laser printer and gives the hard copy to the supervisor for review. The secretary then converts the corrected hard copy to the overhead transparency with the laser printer, and after locating the appropriate sized mat in the supply room, mats the transparency. Task ID#: 070191

Prepare organizational charts by branch/division based on verbal instructions. To perform the task, the secretary obtains a verbal description of the organizational structure from the supervisor. He or she uses a graphics hardware program to input the names and positions of employees into boxes and distributes the completed chart to branches/supervisors. Task ID#: 070081

Interprets Information (F08)

Send a fax of a correspondence dealing with a budget, that needs to be acted upon immediately, to an individual in another state. To perform this task, the secretary chooses the mode of communication (i.e., fax over an express mail service) which is fastest since the material is time sensitive. The secretary obtains the name, area code, and fax number of the specified individual and determines the type and classification of the document to be sent in order to decide which fax machine to use. The secretary sends the fax by feeding the document into the machine and waiting for confirmation of receipt. Task ID#: 080191

Employs Computers (F09)

Enter and modify final reports in the computer. To perform this task, the secretary first types the text into the computer. Next, he or she reorganizes the text and makes any necessary modifications. Any new text, for example, a new chapter, is then copied from separate disks into the appropriate location of the current document. The secretary may type tables separately and insert them into their proper location. When needed, the secretary prints out portions or full copies of the text for correction, addition, and/or deletion. Task ID#: 090351

Use a computer to prepare outlines of speeches for supervisors. To perform this task, the secretary views the text and chooses the most important parts of the document. These main points of the text are typed in bullet format. Task ID#: 090091

Participates as a Member of a Team (F10)

Work together (with supervisor and others) to decide whether or not to change the procedure for proposal review. To perform this task, the secretary reviews documents requesting funds for the new year and identifies any potential changes to the system that might result in saving money. He or she brainstorms the pros and cons of changing the procedure with the supervisor, keeping in mind how a new procedure would impact upon the secretary's duties and how the supervisor would handle the altered flow of work. Then, the secretary sends correspondence to other individuals involved to solicit their opinions. When the replies are received, the secretary submits them to the supervisor for final review and decision-making. The secretary then obtains feedback as to the final decision from the supervisor. Task ID#: 100191

Assist other secretaries in preparing for a board meeting. To perform the task, the secretary types and edits an agenda and proofreads it for corrections. He or she helps to copy the information which goes into board books, puts tabs in the board books, and arranges a meeting room. Task ID#: 100081

Coordinate an outreach program. To perform the task, the secretary in a bank discusses how to implement the mailing and opening of accounts with a co-worker. The two secretaries decide that one will coordinate the mailout and the other will take the customer inquiries resulting from the mailout, and they discuss the feasibility of this extra duty given their current workloads. Task ID#: 100082

Teaches Others New Skills (F11)

Instruct assistants on procedures involved in preparing funding forms. To perform this task, the secretary explains to the assistant the objectives of the program and the office. The secretary retrieves the procedure book and locates the section on funding form preparation. He or she shows the assistant examples of funding forms in the manual while verbally explaining the procedure and allows time for the assistant to take notes. The secretary verifies the assistant's understanding of the procedure by listening to the assistant summarize the procedure. Then, the secretary joins the assistant at the computer terminal and assists him or her in preparing one or two forms, watching, commenting and answering questions. Last, the secretary evaluates the flow of the procedure and identifies or explains any problems or missing steps. Task ID#: 110191

Serves Clients/Customers (F12)

Answer telephone information requests. In order to perform this task, the secretary talks with customers on the telephone and elicits information concerning the customer's needs. The secretary also gathers and writes down the following information: what information is desired, when it is desired, and where the customer is located. The secretary then passes on the request or, if required, personally researches additional information. Next, the secretary relays the information either to the supervisor or directly to the customer via a follow up telephone call. During the interaction process, secretary treats the customer courteously. Task ID#: 120351

Coordinate the resolution of the agent's problems (i.e., the customer wants an exception from a rate increase). To perform this task, the secretary in an insurance firm listens to the agent's problem (a long-term policyholder wants an exception from a rate increase). The secretary determines the level at which the problem can be solved (general manager versus department manager) and refers the agent to the appropriate level of manager. Next, the secretary discusses the problem with the appropriate manager who recommends a particular action. Task ID#: 120091

Works with Cultural Diversity (F15)

Assist non-English speaking customers. To perform the task, the secretary in a bank observes a customer in the lobby who needs to go to a branch to cash a check. He or she gives directions for finding the branch office in Spanish. Task ID#: 150081

Understands How Systems Work (F17)

Understand the procedures and priorities of the office in which the secretary works. In order to perform this task, the secretary must recognize and understand the following office procedures and priorities: 1) that proposals take priority over other typing jobs, 2) that the front desk must always be covered, 3) that secretaries alternate serving as lunchtime relief, 4) the proper way to fill out supply requests, 5) the importance of properly filing budget and expenditure data, and 6) who to consult regarding problems and time constraints. Task ID#: 170351

Underwriting Assistant (Based on Five Interviews)

Underwriting assistants analyze and solve problems involving insurance premiums and claims. They assist underwriters and field staff in processing renewals, cancellations, reinstatements, etc. This involves dealing with questions from policyholders. They review data (claims) for each policyholder using a personal computer and appropriate software to extract and enter policy information. Underwriting assistants also research and resolve discrepancies/questions about policy rates from underwriters or the field. They review manuals for guidelines to determine the risks/hazards of insuring a company.

Functional Skills	Mean	Std. Dev.
F05 Identifies Information	4.80	.45
F12 Serves Clients and Customers	4.40	.89
F06 Prepares Information	4.40	.89
F01 Manages Time	4.00	1.00
F09 Employs Computers	3.80	1.30
F15 Works with Cultural Diversity	3.60	1.67
F10 Participates as a Member of a Team	3.40	.55
F17 Understands How Systems Work	3.20	1.30
F08 Interprets Information	3.20	1.30
F07 Converts Information	3.00	1.22
F11 Teaches Others New Skills	2.60	1.14
F18 Anticipates and Identifies Consequences	2.20	1.30
F14 Negotiates to Arrive at a Decision	2.20	.84
F19 Monitors and Corrects Performance	2.00	1.41
F13 Influences an Individual or Group	1.80	.84
F21 Uses Machines to Monitor/Perform Tasks	1.60	.89
F16 Questions the Status Quo	1.60	.89
F20 Selects Appropriate Technologies	1.40	.55
F22 Maintains and Troubleshoots Technologies	1.40	.89
F02 Manages Financial Resources	1.00	.00
F03 Manages Material and Facility Resources	1.00	.00
F04 Manages Human Resources	1.00	.00

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E05 Listening Skills	4.60	.55
E12 Work Orientation	4.20	1.10
E01 Mathematical Skills	4.20	1.10
E16 Conscientiousness	4.20	.45
E02 Writing Skills	4.00	.71
E15 Cooperation	3.80	.45
E03 Reading Skills	3.80	1.10
E04 Speaking Skills	3.80	1.30
E06 Reasoning Skills	3.80	.45
E08 Decision Making	3.40	1.14
E13 Self Confidence	3.40	.89
E11 Ability to Learn	3.20	1.30
E09 Problem Solving	3.20	1.10
E14 Social	3.00	1.00
E10 Representing Information	2.60	1.52
E07 Creative Thinking	2.00	.71

Job: Underwriting Assistant

Manages Time (F01)

Schedule work tasks in order to complete them according to pre-set standards. To perform this task, the underwriting assistant reviews all information on application or renewal and obtains any needed information from other sources. Further, he or she provides this information to the underwriter and then reviews and balances it when it is returned. From these steps, he or she constructs an entire "package" for the policy and sends it to the field. The underwriting assistant schedules and prioritizes these activities in order to meet a pre-set schedule. Task ID#: 010271

Balance the general job duties and the immediate demands from the field. In order to perform this task, the underwriting assistant makes a note of the start and end dates of assignments. The underwriting assistant then reviews the end dates on all of the work to determine that which has the closest end date. The objective is to get ahead of the routine work, so that it can be completed on time, even with the anticipated emergencies from the field. Task ID#: 010261

Identifies Information (F05)

Review new business to determine if the company will accept it. To perform this task, the underwriting assistant makes sure the application is completely filled out. Next, he or she takes information from the form and uses procedures from manuals to determine the correct classification. The assistant determines if limits are acceptable based upon information found in the manual and if the application will be accepted or denied. Task ID#: 050361

Gather premiums, claims, and expense data, to evaluate discrepancies in the information and to determine what information is correct. In order to perform this task, the underwriting assistant receives a hard copy of the premium for an insurance policy and extracts the necessary numbers. Then the underwriting assistant looks at the microfiche records for the premium as it is listed. The microfiche records are compared to a second hard copy of the premium, to bank account statements, and to totaled-up numbers. The underwriting assistant then compares the three premium values to a norm, and if there is a variance of greater than 2 percent, determines the cause. This involves breaking the premium down into its component parts. Once the reason for the variance is identified, the underwriting assistant writes a memo on one of the hard copies explaining the variance and stating which numbers are correct. Task ID#: 050261

Review an insurance application for completeness and identify requirements for additional information needed for processing. To perform the task, the underwriting assistant reads the application and marks areas that are incomplete and require additional information (e.g., the applicant's driving record, the number of drivers to be insured). The assistant also considers the priority which the applicant might receive if, for example, he or she is a good customer. The underwriting assistant decides whether additional information needs to be collected and whether to begin the underwriting process immediately, collect the additional information first, delay processing, or stop processing altogether. Task ID#: 050281

Set up a new business. To perform the task, the underwriting assistant reviews the company's application to see how the applicant's business should be classed. Next, the assistant looks up the rates for the class code. Task ID#: 050311

Prepares Information (F06)

Review case information to prepare it for the underwriter and check the results. To perform this task, the underwriting assistant ensures that premium amounts recorded are correct by comparing amounts from two systems (one from the computer and one from a form prepared elsewhere). Next, he or she completes the "data review" sheet by taking numbers from several sources and transferring them to the review sheet. He or she notes any problems requiring further attention, by attaching either a memo or note to the data review sheet. Following this, the underwriting assistant returns the data review sheet to the underwriter who reviews it and returns it to the assistant. Finally, assistant checks the underwriter's calculations for accuracy. Task ID#: 050271

Complete renewals in a timely manner. To perform the task, the underwriting assistant orders files for each account from the records department. He or she retrieves policies from the computer and reviews each account in the file to look for critical information, such as a tendency toward losses. He or she decides on policy pricing and transmits this information to the person requesting it. Task ID#: 060361

Maintain and update the rating, renewal, and bank account files. In order to perform this task, the underwriting assistant receives the request for a rate change. He or she sends this request to the appropriate area or authority, makes a note of the request, and adds it to the renewal file. Task ID#: 060261

Coordinate and organize the use of various reports, such as the "Loss Control Report" and the "Financial Report". To perform the task, the underwriting assistant obtains, organizes, and stores all information necessary for an application. The assistant decides which information to send, to whom it will be sent, and in what form it will be sent. He or she then prepares the proper forms for the underwriter, based on the information obtained. All necessary information is put into the "daily report," a folder that contains all underwriting documentation. The amount of information contained in the reports differs depending upon the claimant. Task ID#: 060281

Interprets Information (F08)

Explain to an agent why a policy has been rejected. To perform the task, the underwriting assistant writes a letter to the agent explaining why the policy has been rejected, citing the appropriate information. For example, a policy for a roofing contractor may be turned down because the work is too hazardous. Task ID#: 080311

Employs Computers (F09)

Process new and renewal policies. To perform the task, the underwriting assistant accesses the proper program and fills in the appropriate information from the application. This information is transmitted to the local area network and printed out. Task ID#: 090311

Participates as a Member of a Team (F10)

Act as part of a team in accepting and giving workload. In order to perform this task, the underwriting assistant accepts work from other team members when they are overloaded (or vice-versa). The underwriting assistant attends periodic staff meetings to receive new information on forms, methods, etc., and to voice/listen to problems which have occurred since the last meeting. The underwriting assistant helps make group decisions on how the team will handle situations, e.g., changes in work flow or systems, and contributes in group discussions. Task ID#: 100261

Act as a part of a team (which includes commercial property underwriter, commercial casualty underwriter, select customer underwriter, marketing representative, underwriting assistant, etc.) to serve a number of agents. To perform the task, members attend group meetings and discuss information relevant to the team's functioning (i.e., preparation of reports). The team members gather agent performance records and prepare summaries for the meeting. Members communicate with each other between meetings in order to update each other on agents' activities. Team members may visit an agent to become acquainted with agent and his/her staff. The coordinator of the team acts as an integrator of team input. He or she is always available in the office and is the most frequent point of contact among members. Task ID#: 100281

Teaches Others New Skills (F11)

Train a new "core administrator" on the job after the trainee completes six weeks of training. To perform this task, the underwriting assistant assists the trainee in handling problems he or she is not familiar with. Assistance depends on the nature of the problem. For example, if a premium does not reconcile (i.e., two figures produced by the system do not agree), the assistant shows the trainee how to check the amounts in the system and how to calculate what the premium should have been. Also, assistant shows trainee how to call other departments to learn if they are using the proper premiums. Finally, the assistant explains when and how to take the problem to the underwriter if all other steps fail. Task ID#: 110271

Serves Clients/Customers (F12)

Respond to a client's inquiry about a discrepancy between claims, or premiums paid, versus system amounts. To perform this task, the underwriting assistant receives a client's inquiry about a claim over the telephone or by fax. The assistant either sends the requested data/information by fax or mail to the agent so the agent can reconcile the discrepancy or, if the client has sent amounts, does the calculating to identify the reason for the difference and send him or her the information. Task ID#: 120271

Assist the agent with customer questions. To perform the task, the underwriting assistant reads the coverage form to see what is covered and excluded in specific policies. He or she also refers to appropriate manuals and bulletins for relevant information. Finally, the assistant calls the agent with the information. Task ID#: 120361

Help agents classify a business. To perform the task, the underwriting assistant receives a call from an agent about an unusual account which is difficult to classify. The underwriting assistant identifies similar accounts, and compares files to find the closest match. The assistant also checks with the audit or engineering departments for information. Finally, the assistant contacts the agent and conveys the information. Task ID#: 120311

Negotiates to Arrive at a Decision (F14)

Negotiate workflow decisions during a meeting with supervisors. In order to perform this task, the underwriting assistant first evaluates new methods of doing work (that is, he or she questions the wisdom of the new method being presented). The underwriting assistant asks for clarification of the new method from the supervisor and makes suggestions for improvement, if a better way seems possible. The underwriting assistant then discusses with the supervisor and eventually arrives at a decision on the implementation of the new method. Task ID#: 140261

Understands How Systems Work (F17)

Use the computer system efficiently, which involves understanding how it works. To perform this task, the underwriting assistant first accesses the computer system by applying the password, and enters the appropriate codes in order to obtain the needed information. The information is then printed out. Finally, the underwriting assistant exits the system by using the appropriate sign-off codes. Task ID#: 170271

Visualize/know the entire renewal process so that the right chain-of-command or workflow is followed. In order to perform this task, the underwriting assistant first reviews the policy information. The underwriting assistant needs to be able to look at a policy package and understand from what it contains where it stands in the complex renewal process so that he or she can expedite the work. Then the underwriting assistant sends the information to the proper place (e.g., the underwriter), who sets the reserves (has the dollar amount ready to place in reserve in case of cancellation). Task ID#: 170261

Anticipates and Identifies Consequences (F18)

Ensure the information required at the end of the process is obtained at the appropriate time in the process. To perform this task, the underwriting assistant obtains the "final" package from Field Account Services. He or she reviews the "final" to ensure that all necessary information is included. If any information is missing, the assistant calls the Field Account Services to obtain the relevant data. He or she recognizes the consequences of not obtaining the complete information since correcting information causes delays in processing. Task ID#: 180271

Accommodations and Personal Business

Chef (Based on Three Interviews)

Chefs prepare food using the best ingredients for the lowest price. They hire a staff (sous chef, cleaning crew, preparation team), train the staff, and schedule their working hours. Chefs order food supplies and maintain an inventory of supplies on hand. Ordering food supplies includes conducting market research to obtain best quality for lowest price. They develop seasonal menus and keep the menus in line with the budget to maintain profitability.

Functional Skills		Mean	Std. Dev.
F02	Manages Financial Resources	5.00	.00
F03	Manages Material and Facility Resources	4.67	.58
F10	Participates as a Member of a Team	4.33	1.15
F04	Manages Human Resources	4.33	1.15
F01	Manages Time	4.33	1.15
F11	Teaches Others New Skills	4.00	1.00
F19	Monitors and Corrects Performance	4.00	1.73
F17	Understands How Systems Work	3.67	1.15
F15	Works with Cultural Diversity	3.67	1.15
F13	Influences an Individual or Group	3.67	2.31
F08	Interprets Information	3.00	2.00
F16	Questions the Status Quo	3.00	.00
F05	Identifies Information	2.33	2.31
F22	Maintains and Troubleshoots Technologies	2.33	2.31
F06	Prepares Information	2.33	1.15
F18	Anticipates and Identifies Consequences	2.33	1.15
F21	Uses Machines to Monitor/Perform Tasks	1.67	1.15
F09	Employs Computers	1.67	1.15
F14	Negotiates to Arrive at a Decision	1.67	1.15
F07	Converts Information	1.67	1.15
F12	Serves Clients and Customers	1.67	1.15
F20	Selects Appropriate Technologies	1.33	.58

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E12 Work Orientation	4.67	.58
E10 Representing Information	4.67	.58
E07 Creative Thinking	4.67	.58
E16 Conscientiousness	4.67	.58
E11 Ability to Learn	4.33	1.15
E01 Mathematical Skills	4.33	1.15
E15 Cooperation	4.33	1.15
E13 Self Confidence	4.33	1.15
E08 Decision Making	4.00	1.00
E09 Problem Solving	3.67	1.53
E05 Listening Skills	3.33	2.08
E04 Speaking Skills	3.00	2.00
E02 Writing Skills	3.00	1.00
E03 Reading Skills	2.67	1.15
E06 Reasoning Skills	2.67	.58
E14 Social	2.33	1.15

Job: Chef

Manages Financial Resources (F02)

Order/buy pork loins and estimate the number of portions that can be sold at particular prices. In order to perform this task, the chef checks the price of the item with the suppliers and then orders accordingly. Once received, the chef weighs, cleans, cooks, and portions the pork loins. He or she calculates the price of each portion, and prices the side dishes which complement the pork. Task ID#: 020591

Prepare weekly sales projections. To perform this task, the chef conducts an initial inventory of food supplies (and completes the full inventory later). He or she determines how much food was bought and from this calculates the costs of purchased and on-hand food. Next, the chef determines sales with an income estimate sheet. Task ID#: 020411

Perform a cost analysis on menu items in order to turn a profit. To perform this task, the chef conducts market research, such as calling purveyors and searching for the freshest meat. He or she also assesses labor and ingredient costs, taking into account the cost of garnishes and cooking weight loss. Task ID#: 020421

Manages Material and Facility Resources (F03)

Acquire all kitchen products, from food to a food processor, kitchen mats, towels, and dishwashing liquid. To perform this task, the chef conducts an inventory of existing items and identifies needed supplies and products. He or she then identifies the requirements for obtaining the supplies. Task ID#: 030421

Manage the execution of the food preparation and storage. In order to perform this task, the chef cleans the portions of meat and fish and stores the food in the appropriate places. The chef documents the number of portions placed in storage and the number of portions removed from storage. Finally, the chef calculates the cost of each portion in storage before each is sold. Task ID#: 030591

Manages Human Resources (F04)

Develop a "help power plan" which involves the identification of staffing needs. To perform this task, the chef first identifies the menu items and associated stations and determines how many items/stations are to be served. Along with this, the chef determines the number of people needed to serve in each station. He or she may also include an identification of the menu and the number of anticipated guests in this process. Task ID#: 040411

Hire qualified staff members who complement each others strengths and weaknesses. To perform this task, the chef interviews prospective employees and reads their resumes to decide if necessary qualifications are met. The chef then tries out a prospective employee on a provisional basis for a week to assess his or her expertise, and monitors the new staff member's performance. Task ID#: 040421

Identifies Information (F05)

Keep abreast of current culinary trends. To perform this task, the chef reads recipes and cookbooks and meets with people in the trade to share ideas. These meetings can occur in person or over the telephone. Task ID#: 050421

Interprets Information (F08)

Communicate menu changes to the staff. To perform the task, the chef practices the preparation of the new food item and then demonstrates the procedure to the staff. Task ID#: 080411

Participates as a Member of a Team (F10)

Maximize food quality by making a team effort and keeping an eye on each employee. In order to perform this task, the chef cleans and gives the pork to the sous chef who puts a roll around the loin and boils the meat for a few minutes. The chef watches the sous chef to ensure that the loin stays moist as the sous chef sautes and adds the sauces and spices to the pork loin. The chef observes another kitchen staff member prepare a brown sugar sauce and slice fresh mangos. He or she then observes the staff member store, by individual parts, the meat and inspects it in the refrigerator. Task ID#: 100591

Teaches Others New Skills (F11)

Teach a kitchen worker how to prepare a new dish. To perform the task, the chef first demonstrates the recipe by making the dish, from beginning to end, in front of the kitchen worker. The chef explains the importance of following the prescribed steps and then gives the recipe to the worker to study. Finally, the chef teaches the kitchen employee how to use new or specialized equipment associated with the recipe. Task ID#: 110421

Works with Cultural Diversity (F15)

Have constant dialogue with the staff to alleviate conflicts that may stem from cultural differences, regardless of cultural background. In order to perform this task, the chef makes sure that all employees are treated the same. The chef must understand the differences between cultures, i.e., prayer times, food preferences, etc. Task ID#: 150591

Understands How Systems Work (F17)

Make sure everyone understands his/her responsibilities in the kitchen. In order to perform this task, the chef must first make task assignments which are interchangeable between team members. Finally, the chef ensures that the work gets done and the food is prepared. Task ID#: 170591

Monitors and Corrects Performance (F19)

Monitor station performance. To perform this task, the chef watches the performance of a station in the kitchen (e.g., the baking section), corrects any problems which might arise, and maintains readiness to perform station duties when needed. Task ID#: 190411

Correct inconsistencies in food preparation. In order to perform this task, the chef must first observe food preparation in the kitchen. If he or she notices any problems or inconsistencies, then he or she makes corrections on the spot to ensure high food quality for the patrons. Task ID#: 190591

Front Desk Clerk (Based on Four Interviews)

Front desk clerks check guests in and out in a timely manner using a menu-driven computer. They satisfy needs of incoming guests, which involves taking messages, answering general questions (tourist information), and securing safe deposit boxes. Front desk clerks maintain a line of credit for guests' length of stay. They also maintain "key inventory" for rooms (punching new keys for guests and ensuring the old keys no longer work). They monitor room rates to ensure that guests are charged appropriately and handle money (i.e., cash checks, make change, and handle foreign exchange).

Functional Skills		Mean	Std. Dev.
F15	Works with Cultural Diversity	4.50	.58
F17	Understands How Systems Work	4.25	.50
F05	Identifies Information	3.75	.96
F09	Employs Computers	3.75	.96
F06	Prepares Information	3.75	.50
F10	Participates as a Member of a Team	3.50	1.29
F13	Influences an Individual or Group	3.25	1.71
F01	Manages Time	3.25	1.50
F08	Interprets Information	3.00	1.63
F11	Teaches Others New Skills	3.00	.82
F18	Anticipates and Identifies Consequences	2.50	1.00
F14	Negotiates to Arrive at a Decision	2.50	1.00
F07	Converts Information	2.00	1.15
F21	Uses Machines to Monitor/Perform Tasks	2.00	.82
F16	Questions the Status Quo	2.00	.00
F19	Monitors and Corrects Performance	1.50	1.00
F03	Manages Material and Facility Resources	1.25	.50
F04	Manages Human Resources	1.25	.50
F20	Selects Appropriate Technologies	1.25	.50
F22	Maintains and Troubleshoots Technologies	1.25	.50
F02	Manages Financial Resources	1.00	.00

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E04	Speaking Skills	5.00	.00
E14	Social	5.00	.00
E05	Listening Skills	4.50	.58
E15	Cooperation	4.25	.96
E16	Conscientiousness	4.00	.82
E02	Writing Skills	3.75	.50
E09	Problem Solving	3.75	.50
E01	Mathematical Skills	3.75	.96
E11	Ability to Learn	3.75	.50
E03	Reading Skills	3.50	1.73
E12	Work Orientation	3.50	1.29
E08	Decision Making	3.50	1.00
E13	Self Confidence	3.00	.82
E06	Reasoning Skills	3.00	1.41
E10	Representing Information	2.75	.96
E07	Creative Thinking	2.50	.58

Job: Front Desk Clerk

Manages Time (F01)

Schedule time to complete reports in order of importance. To perform this task, the front desk clerk goes through the credit reports and identifies those customers checking out that day who have exceeded their credit limit. He or she prioritizes reports according to checkout time so that they may be identified before checkout. Task ID#: 010011

Identifies Information (F05)

Research customer's credit when it appears that the customer has exceeded his/her limit. To perform this task, the front desk clerk reviews the registration cards and checks group charges to ensure that a single customer was not charged for an entire group. Task ID#: 050011

Resolve questions that arise due to conventions in-house. To perform this task, the clerk obtains the "resume" book (book of group functions conducted at the hotel) from the control room and opens it to the correct date and page indicating which customers are billed directly. The clerk verifies the roster and makes billing adjustments. If a group's function is not listed in the roster, he or she contacts the meeting planner. Task ID#: 050021

Ask housekeeping when the room for an important guest will be ready. In order to perform this task, the front desk clerk notices on the arrival list that an important guest is due. The clerk calls housekeeping to find out when the guest's room will be ready and records the time. Task ID#: 050141

Prepares Information (F06)

Check out customers who have a particular complaint. To perform this task, the front desk clerk evaluates the information provided by the guest (e.g., heat did not work) and makes appropriate bill adjustments (e.g., gives 50% off room). Task ID#: 060011

Register guests. To perform this task, the clerk enters the customer's account number on the computer and verifies the information, such as the rate, length of stay, and address. He or she obtains the customer's credit card and processes it through the machine to determine if the customer has sufficient credit. The clerk then selects the room according to availability and the customer's specifications. The clerk asks the guest to sign the registration card and gives key to the guest. Task ID#: 060021

Converts Information (F07)

Complete the rebate form to record customer complaint. To perform this task, the front desk clerk writes down the nature of the customer's complaint and what action was taken to remedy the situation. Task ID#: 070011

Interprets Information (F08)

Convey customers' complaints and own reactions to managers. To perform this task, the front desk clerk reports to his/her manager, either orally or in writing, customers' problems and his or her own reactions to the problems. Task ID#: 080011

Find the appropriate person to fix a problem relayed by a guest. In order to perform this task, the front desk clerk must first get complete information from the guest. Then the clerk calls the appropriate maintenance person or asks the operator to contact the maintenance person. The clerk calls the guest to let him or her know that someone is coming to deal with the problem. Later the clerk calls the guest to make sure the problem was resolved. Task ID#: 080141

Employs Computers (F09)

Enter charges for each account to keep updated records (i.e., telephone and restaurant charges). To perform this task, the front desk clerk enters information on the computer using menu driven software. He or she punches in the room number and posts the charges using function keys. Last, he or she verifies the transaction to ensure that the entry is correct. Task ID#: 090011

Check in a guest. In order to perform this task, the front desk clerk must first greet the guest and ask his/her name. Then the clerk keypunches into the computer information such as name, address, room type, and length of stay. Next the clerk gets the registration card from the file and asks the guest to verify the address and sign the card. The clerk shows the guest the rate, records the method of payment, and, if necessary, gets credit card approval. The clerk checks the guest in on the computer, looking for rooms available in the correct category. After the room has been identified, he or she gets the code for the room key. Finally, after the guest has been checked in, the clerk goes back to the computer to modify information (if necessary), fill out abbreviated words, and check for correct spelling. Task ID#: 090141

Teaches Others New Skills (F11)

Train new clerks. To perform this task, the clerk explains to the new clerks how to operate the computer and wait on customers. Then he or she watches as the new clerks perform tasks and answers trainees' questions. Task ID#: 110011

Serves Clients/Customers (F12)

Check in a customer. To perform this task, the clerk greets the customer and reviews the registration cards to ensure that the customer is registered. He or she enters the customer's account number into the computer and determines if the room is ready. If the room is ready, the clerk puts the customer in "I," or in-house, status. The clerk asks the customer to fill out the registration card, including his or her address, and inquires if the customer has specific needs, such as transportation. If the customer pays using a credit card, the clerk processes the transaction. The clerk then punches a key, annotates frequent flier mileage, if appropriate, and wishes the customer a pleasant stay. Task ID#: 120011

Resolve customers complaints. To perform this task, the clerk listens to the problem and apologizes to the guest. If the problem is too difficult to handle, the clerk calls the supervisor. The clerk then makes any rate adjustment or provides amenities and prepares a room service slip. Task ID#: 120021

Help guests in an emergency (such as a guest needing a suit cleaned for an important function). In order to perform this task, the front desk clerk first talks to the guest and gathers relevant information, such as the time of the function. Next the clerk calls the appropriate person, in this case the head of housekeeping, and explains the situation and its importance. The clerk informs the guest of the result of this interaction (such as it is possible to have a suit cleaned). Then the clerk calls housekeeping back to make sure the job is done. Finally, when the suit is ready, the clerk sends someone to the guest's room with the suit or takes it to the guest him/herself. Task ID#: 120141

Customize a guest's quarters to satisfy special needs. The front desk clerk asks the guest, who is checking-in, if there are any special requests. If so, the clerk coordinates with the designated hotel department to satisfy the guest's needs (e.g., baby crib, extra blankets). If the guest is a VIP, the clerk places fruit/flowers in the room. Task ID#: 120181

Influences an Individual or Group (F13)

Accommodate a guest that is upset with a room. To perform this task, the front desk clerk listens carefully to determine the nature of the problem. He or she suggests an alternative room that is available, and after the rooms are switched, contacts the guest to ensure that he or she is satisfied. Task ID#: 130181

Works with Cultural Diversity (F15)

Check-in a guest who speaks limited English. To perform this task, the front desk clerk who is checking-in a limited-English-speaking guest tries to find someone on the hotel staff with the same ethnic background by checking the hotel shift/roster. He or she also uses body language (hand/arm signals) to determine the guests intentions. The front desk clerk checks the guest in by taking an imprint of a major credit card. Task ID#: 150181

Understands How Systems Work (F17)

Find a room for a guest who arrives early. In order to perform this task, the front desk clerk uses a computer to determine what rooms are available. The clerk then "inblocks" a room that was assigned to someone else but is ready and available, blocks another room that can be cleaned later for a guest who is expected to arrive later. The clerk calls housekeeping and tells them to hurry and clean a room for another guest who may come early. Task ID#: 170141

Assistant Housekeeper (Based on Four Interviews)

The assistant housekeepers oversee that the housekeeping department functions appropriately. They directly supervise the housekeepers, making sure that rooms, hallways and public areas are cleaned and in order. Assistant housekeepers keep records concerning whether rooms have or have not been cleaned or if rooms are out of order. They keep inventory records of laundry, stock in rooms (furniture and fixtures), and amenities and toiletries. Assistant housekeepers schedule workers, set standards of cleanliness, and evaluate workers' performance.

Functional Skills		Mean	Std. Dev.
F01	Manages Time	4.75	.50
F11	Teaches Others New Skills	4.75	.50
F15	Works with Cultural Diversity	4.50	.58
F12	Serves Clients and Customers	4.50	.58
F19	Monitors and Corrects Performance	3.75	1.89
F08	Interprets Information	3.75	1.89
F04	Manages Human Resources	3.50	1.91
F10	Participates as a Member of a Team	3.50	1.29
F14	Negotiates to Arrive at a Decision	3.00	.82
F03	Manages Material and Facility Resources	3.00	1.41
F05	Identifies Information	3.00	1.63
F13	Influences an Individual or Group	2.75	1.71
F18	Anticipates and Identifies Consequences	2.75	1.26
F06	Prepares Information	2.50	1.29
F20	Selects Appropriate Technologies	2.50	1.91
F17	Understands How Systems Work	2.50	1.29
F16	Questions the Status Quo	2.50	.71
F22	Maintains and Troubleshoots Technologies	2.25	1.89
F21	Uses Machines to Monitor/Perform Tasks	2.25	1.89
F07	Converts Information	2.00	1.41
F09	Employs Computers	2.00	.82
F02	Manages Financial Resources	1.75	.96

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E05 Listening Skills	4.50	.58
E04 Speaking Skills	4.50	.58
E14 Social	4.25	1.50
E15 Cooperation	4.25	1.50
E03 Reading Skills	4.00	.82
E02 Writing Skills	3.75	.96
E16 Conscientiousness	3.75	1.89
E08 Decision Making	3.50	1.73
E09 Problem Solving	3.50	1.29
E12 Work Orientation	3.50	1.91
E13 Self Confidence	3.50	1.73
E11 Ability to Learn	3.50	1.91
E06 Reasoning Skills	3.25	.96
E01 Mathematical Skills	2.75	1.71
E07 Creative Thinking	2.75	1.50
E10 Representing Information	2.00	.82

Job: Assistant Housekeeper

Manages Time (F01)

Manage time to ensure that all rooms have been cleaned properly. To perform this task, the assistant housekeeper reports to work on time and prepared. He or she collects necessary paperwork, such as the housekeeping report and the vacant ready report, obtains other pertinent information, and collects a beeper. The assistant housekeeper then identifies who is working by viewing the poster listing of housekeepers. He or she then scans the beeper list to identify what beeper channel the houseman (the individual in charge of linens and ashtray supplies) is on. The assistant housekeeper must also identify the "specials" for the day (from the new HBO books), and three checkout rooms for the housekeepers. The assistant housekeeper then prioritizes the rooms to be cleaned. Finally, he or she makes the cleaning assignments and inspects the rooms following cleaning. He or she may re-inspect as necessary. Task ID#: 010391

Clean the bathroom in a specified period of time. To perform this task, the housekeeper cleans the bathroom, taking most of the time to wipe the tile. He or she keeps track of how long it takes to clean the room. Task ID#: 010251

Manages Material and Facility Resources (F03)

Distribute amenities to the rooms. To perform the task, the housekeeper picks up shampoo and soap in baskets. Next, he or she puts the amenities in the rooms. Also, he or she puts paper, envelopes, and postcards in the rooms. Task ID#: 030251

Keep inventory of linens. In order to perform this task, the assistant housekeeper goes to the closets on all floors and counts the number of clean linens in them. The assistant housekeeper then counts the number of clean linens downstairs. With this information, the assistant housekeeper determines the number of linens which are dirty and which therefore need to be sent to the laundry service. Then the assistant housekeeper gives these figures to the executive housekeeper to see what is on order and what is in stock. Task ID#: 030131

Manages Human Resources (F04)

Assign a housekeeper to a cleaning section designated as one with minimum supervision. To perform the task, the assistant housekeeper reviews the individual skills of all the housekeepers. He or she selects the candidate who is most qualified to work independently. He or she verbally communicates to the selected housekeeper what is expected, and provides additional training as needed. Task ID#: 040381

Place employees in productive working groups when scheduling them for work. In order to perform this task, the assistant housekeeper determines who is available to work and when, and then pairs the inexperienced workers with the more experienced workers. The next step is to put the appropriate employees in work time slots. If there were employees who were not present when assignments were made, the assistant housekeeper logs their names in so that the room attendant will know who is scheduled to work with whom. Task ID#: 040131

Prepares Information (F06)

Prepare a chart which shows how long it takes to inspect the rooms on one floor. In order to perform this task, the assistant housekeeper draws a schematic diagram of how the floor is set up. Then the assistant housekeeper marks out time based on a 15-to-20 minute average inspection for each room. Next, the assistant housekeeper makes a layout of the room to show every item that needs to be checked. Finally, this information is passed on to the head houseman and floor managers so they know what to expect and how long it will take to inspect each room. Task ID#: 060131

Interprets Information (F08)

Supply information to hotel guests regarding a change in hotel services. To perform this task, the assistant housekeeper collects letters for the guests' rooms. He or she then delivers the correct quantity of letters to each section housekeeper and communicates the necessity of placing the letters in each room (perhaps communicating to a variety of cultures, e.g., a Spanish-speaking housekeeper). Finally, the assistant housekeeper inspects a number of the rooms to ensure that the letters are present. Task ID#: 080391

Relay a recleaning order to a housekeeper. To perform the task, the assistant housekeeper inspects the room and identifies an error. He or she communicates the problem to the relevant housekeeper and sends that housekeeper back to reclean the room, retraining the housekeeper first, if necessary. Finally, he or she follows up on the recleaning order by reinspecting the room. Task ID#: 080381

Tell a room attendant or supervisor how to prepare a room for guests. In order to perform this task, the assistant housekeeper takes a group of room attendants to a dirty room and explains what is expected of them and how to clean the room. Then the assistant housekeeper takes the group to a clean room and shows the group whether proper procedures were followed. The assistant housekeeper makes sure to tell the group that the supervisor will follow up to see that all rooms are cleaned properly and that the supervisor will report who has been slow, fast, or delinquent. After that, the assistant housekeeper returns for spot checks at interval times to see how many rooms have been done, check cleaning jobs, and to make sure that the floor supervisors are giving accurate reports and assessments. Task ID#: 080131

Participates as a Member of a Team (F10)

Help clean rooms during peak check-in periods. To perform this task, the assistant housekeeper identifies the speed of the workflow (the pace of room cleaning). He or she redistributes room assignments when the pace is off target, sometimes by using another housekeeper's cleaning cart and cleaning the needed room(s), letting that person know which rooms have been cleaned. Task ID#: 100391

Teaches Others New Skills (F11)

Teach a new housekeeper how to properly clean a room. To perform this task, the assistant housekeeper gives trainee a basic orientation to room cleaning, which includes the procedures of cleaning clockwise and following a cleaning checklist. The assistant housekeeper teaches the trainee proper amenity placement and demonstrates proper cleaning techniques. Finally, the assistant housekeeper allows the trainee to clean a room and provides feedback on his or her performance. Task ID#: 110391

Serves Clients/Customers (F12)

Interact with customers in a personal manner to ensure customer satisfaction with services. To perform this task, the assistant housekeeper familiarizes himself or herself with a breakout sheet which lists the customers' names by the rooms in which they are staying. He or she is then able to read a guest's name off of a sheet, greet the guest by using his or her last name, and ask the guest if his or her individual needs are being met. This makes the guest feel as if he or she is receiving personal attention. If customer needs are not being met, the assistant housekeeper takes the necessary steps to satisfy them. Task ID#: 120391

Deal with guest complaints, such as a room not properly cleaned. To perform this task, the assistant housekeeper listens to a complaint from a guest or the front desk in order to ascertain the complaint's validity. He or she then does whatever is necessary, within reason, to rectify the problem. Following this, the assistant housekeeper determines who is responsible for the discrepancy, communicates the complaint to that person, and takes any appropriate actions to ensure that the discrepancy does not happen again. If the problem is very serious, the assistant housekeeper may follow up with a letter or an amenity to the guest. Task ID#: 120381

See to it that room attendants respond to the guests' needs and requests. In order to perform this task, the assistant housekeeper, after receiving a call from a guest for a new set of linens, notifies the room attendant or houseman to go to the room and make the necessary change. Then the assistant housekeeper follows up on the request by making sure that the request has been responded to in a timely manner. This can be done by calling the guest to verify that the work was done or by personally checking the room. Task ID#: 120131

Influences an Individual or Group (F14)

Lead group meetings of employees. To perform this task, the assistant housekeeper calls all of the employees in for the monthly meeting (usually in memo form); talks about the strengths/weaknesses of the work performance (as reflected in the customers' comments); gives recommendations for improvement; listens to employee feedback; and tries to motivate the employees to do well, to accept criticism, and to work as a team. Task ID#: 130131

Works with Cultural Diversity (F15)

Counsel an employee from another culture on personal grooming habits. To perform this task, the assistant housekeeper identifies a problem with an employee's grooming habits, then collects information about it from others before beginning counseling. The assistant housekeeper is able to recognize that the hygiene habits of an employee may be different from the habits of most of the other workers because of cultural differences. The assistant housekeeper counsels the employee, in private, and offers alternatives to his or her present grooming routine. Finally, the assistant housekeeper follows up to ensure that grooming standards are being met. Task ID#: 150391

Supervise housekeepers with a wide variety of cultural backgrounds and differing levels of proficiency in English. To perform this task, the assistant housekeeper evaluates how much English a housekeeper knows, and then applies individualized solutions to situations that arise from language differences. The assistant housekeeper places personal biases aside and discovers different ways to communicate needed information (i.e., demonstrations, hand signals). Task ID#: 150381

Use different ways of communicating with a customer. To perform the task, the housekeeper tries to communicate with the customer using hand gestures. Task ID#: 150251

Understands How Systems Work (F17)

Change a room's status from dirty to clean. To perform this task, the assistant housekeeper first inspects the room and, if it is deemed clean, changes its status over the telephone from dirty to clean. Next, he or she performs the clean-update sequence. If the printout shows that the room is still dirty, the room is re-inspected; if the printout shows that the room is clean, the task is completed. Task ID#: 170391

Anticipates and Identifies Consequences (F18)

Ensure that the rooms are clean on a day when all or almost all rooms are occupied. To perform the task, the assistant housekeeper refers to the house count to determine exactly what needs to be cleaned. He or she makes cleaning assignments accordingly and determines any needed actions. If he or she determines that the hotel will not be full the next night, he or she might leave some rooms dirty initially. Finally, the assistant housekeeper follows up to ensure that assignments are correct. Task ID#: 180381

Monitors and Corrects Performance (F19)

Inspect a room and take any necessary actions. To perform the task, the assistant housekeeper first performs a room inspection (with a checklist). He or she identifies any discrepancies and brings the housekeeper back to the room in question. The assistant housekeeper shows the housekeeper the discrepancy, offers counsel on how to rectify the problem(s), and reinspects the room after changes are made. Task ID#: 190391

Selects Appropriate Technologies (F20)

Select the equipment needed to perform a job in a most effective manner. In order to perform this task, the assistant housekeeper must decide on which vacuum cleaner to use or which rug shampoo machine to employ. This includes looking at different vendors' products to see what is available and making sure that the people who use a machine are skilled in it. Task ID#: 200131

Manufacturing, Agri-Business,
Mining, and Construction

Electrician (Based on Five Interviews)

Electricians install, operate, troubleshoot, maintain and repair various types of electrical equipment. They determine or design the correct materials needed for a job, usually by reading a blueprint. They install wiring, conduit, circuits, electrical panels, transformers and power distribution equipment and ensure that they are installed correctly. Electricians troubleshoot equipment that fails to function properly. They coordinate installation requirements with other electricians and contractors.

Functional Skills		Mean	Std. Dev.
F21	Uses Machines to Monitor/Perform Tasks	4.40	.55
F20	Selects Appropriate Technologies	4.40	.55
F05	Identifies Information	4.40	.89
F01	Manages Time	4.20	.84
F17	Understands How Systems Work	4.20	.45
F11	Teaches Others New Skills	4.20	.45
F22	Maintains and Troubleshoots Technologies	4.20	.84
F07	Converts Information	4.00	1.22
F08	Interprets Information	3.80	1.10
F12	Serves Clients and Customers	3.60	1.67
F03	Manages Material and Facility Resources	3.40	1.67
F10	Participates as a Member of a Team	3.40	1.14
F06	Prepares Information	3.20	1.10
F18	Anticipates and Identifies Consequences	3.00	1.41
F15	Works with Cultural Diversity	3.00	1.58
F19	Monitors and Corrects Performance	3.00	1.41
F02	Manages Financial Resources	2.80	1.48
F04	Manages Human Resources	2.80	1.64
F13	Influences an Individual or Group	2.80	1.48
F09	Employs Computers	2.40	.89
F14	Negotiates to Arrive at a Decision	2.40	1.34
F16	Questions the Status Quo	1.80	1.30

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E03 Reading Skills	4.80	.45
E16 Conscientiousness	4.60	.55
E09 Problem Solving	4.40	.55
E11 Ability to Learn	4.40	.55
E08 Decision Making	4.40	.89
E15 Cooperation	4.40	.55
E12 Work Orientation	4.20	.84
E06 Reasoning Skills	4.20	1.10
E13 Self Confidence	4.20	.84
E05 Listening Skills	4.00	.71
E10 Representing Information	4.00	.71
E01 Mathematical Skills	4.00	1.22
E07 Creative Thinking	3.60	.89
E04 Speaking Skills	3.20	.45
E14 Social	3.20	.84
E02 Writing Skills	2.40	1.14

Job: Electrician

Manages Time (F01)

Budget the time needed to install equipment in a computer room. In order to perform this task, the electrician views blueprints and a contractor order to determine the pieces of equipment to be connected. Further, a determination is made concerning the time needed for equipment installation, based upon blueprints, measures, manufacturer's installation instructions, and the equipment itself. Next, an equipment list is developed, and the materials to be used are ordered with a purchase order or material requisition form. Calculations are made in order to determine the amount of time it will take to connect each item. Finally, these time requirements are coordinated with the general contractor. Task ID#: 010461

Provide the supervisor with input on how to prioritize different job tasks. To perform the task, the electrician evaluates which repairs are needed by asking the equipment operator. The electrician also uses testing devices to troubleshoot the equipment and to determine the problems on a variety of jobs. Along with this, the electrician evaluates the amount of time necessary to repair each piece of equipment. This evaluation includes consideration of the repairs needed, the availability of replacement parts, and the criticality of the equipment to operations. The electrician informs the supervisor of the time needed to perform each job and of the job's criticality. The supervisor then takes this information and makes a decision as to the order of repair jobs. Task ID#: 010541

Design and install a customized electrical system in a building under construction. To perform this task, the electrician determines where to order specific material for a job, obtains the equipment that is needed immediately and makes up a schedule for installation of the system. The electrician meets with other contractors and the customer to coordinate when to start work, orders the material for the job, and schedules labor for the job (e.g., gives the contractor a list of the specific skills needed in the job's performance and of when they will be needed). The electrician then organizes a work schedule and briefs other electricians on it. The electrician makes periodic checks on work progress and coordinates with other contractor personnel on time and construction requirements. Finally, the electrician inspects the completed work. Task ID: 010321

Manages Material and Facility Resources (F03)

Project material requests for a construction site. To perform the task, the electrician reviews the two-week and long-term construction schedules and projects material requirements for the following month. The electrician next reviews the current material and compares it with the material requested; from this comparison a list of required material is developed. The electrician then reviews lists of assigned stock, develops a purchase list of additional material required, reviews projected manpower, reviews support material requests, and orders additional support equipment. Task ID#: 030471

Arrange for delivery and storage of electrical components. To perform this task, the electrician analyzes the job to determine when equipment is required, and evaluates available storage facility requirements. Then, the electrician coordinates arrangements for the storage site with the contractor, and coordinates transportation of the equipment with the vendor and internally. The electrician schedules personnel to deliver the equipment and supervises its delivery, to include inspecting and testing the delivered equipment, and coordinating with delivery personnel the return of damaged equipment. Finally, the electrician secures the accepted equipment. Task ID#: 030321

Forecast labor and material needed for a job in order to estimate cost. To perform the task, the electrician looks at the job requirements and conveys his or her comments to the general contractor's office. Upon receipt of a reply, the electrician incorporates changes into the construction schedule, developing a list of any materials needed. Finally, the electrician identifies and orders the long lead items (those that have a longer acquisition period). Task ID#: 020471

Manages Human Resources (F04)

Schedule work assignments for other electricians. To perform this task, the electrician reviews all installation tasks to determine personnel scheduling. He or she then lists tasks in order of priority, matches tasks with personnel for given periods of time, and assigns tasks to individuals. The electrician then supervises workers' performance and provides feedback. Finally, the electrician coordinates with subcontractors for follow-on work. Task ID#: 040321

Identifies Information (F05)

Identify the information required to repair a malfunctioning breaker in a power panel. In order to perform this task, the electrician must review the manufacturer specifications which describe how the breaker functions. Next, the electrician must gather any appropriate test instruments and tools which were identified from the initial information search. Task ID#: 050461

Identify and locate drawings/schematics for reference and for circuit identification when a piece of equipment breaks down. To perform the task, the electrician realizes that an input is missing in a test cell for jet engines. He or she researches the technical manuals, obtains the schematic diagram for the specific circuit, and uses this diagram to make a check throughout the circuit and isolate the faulty component. Task ID#: 050541

Install power-factor correction unit, using details provided by both the electrical coder and the manufacturer. To perform this task, the electrician obtains technical specifications from the manufacturer, visits the installation site to check for physical requirements, coordinates the installation with the site supervisor, and inspects the physical site. Finally, the electrician compares the requirements against local codes. Task ID#: 050321

Prepares Information (F06)

Prepare a two-week activity report for the main office. To perform the task, the electrician lists all personnel, projects manpower requirements, and reviews the current budget to develop a proposed budget for the next two weeks. Task ID#: 060471

Converts Information (F07)

Take the information found in an Request For Information (RFI) response and convert the data into a form which is usable for other electricians. To perform the task, the senior electrician reads an RFI response and decides on the appropriate format in which to present the data. The electrician converts the written information into a drawing, presents the drawing to the other electricians, and briefs them on the meaning. Task ID#: 070471

Convert the two-dimensional information found on a blueprint to the three-dimensional requirements for installing lighting into a false ceiling. To perform the task, the electrician reads the electrical blueprint for the overall layout of the project. He or she checks the actual drawings for the actual finish (details of the ceiling and fixtures). The electrician then checks the mechanical drawing for the air conditioning duct, roof diameter, and any other components which will affect the layout. He or she then gathers the needed tools and material, strikes up the center line for the fixture, fastens the hangers to the ceiling, prefabricates a conduit, and installs the fixture. Task ID#: 070481

Interprets Information (F08)

Explain to other electricians the procedures for installing newly received equipment. To perform this task, the electrician must read the manufacturer's installation instructions, request from the manufacturer any needed clarifications, and develop installation diagrams. Finally, the senior electrician must use the information obtained to instruct other electricians on equipment installation. Task ID#: 080461

Brief the project manager on changes in electrical requirements. To perform the task, the senior electrician develops additional materials and personnel requirements based on a Request for Information response. He or she sends the appropriate purchase order to a company and meets with the project manager to explain the new requirements. Task ID#: 080471

Interpret information indicating location of an air conditioning duct found when wire was being run into an electrical closet. To perform the task, the electrician finds an air conditioning duct in the electrical closet, checks the mechanical drawings for accuracy, and communicates the conflict to the air conditioning contractor. The contractor and the electrician then meet with mechanical and electrical engineers to explore the problem and determine another location for the air conditioning ducts. Finally, the ducts are moved to the new location. Task ID#: 080481

Participates as a Member of a Team (F10)

Work as a team to install overhead fixtures. To perform the task, the foreman divides the electricians into two groups and briefs the teams on their responsibilities with regard to the project. Team A works to unload the needed materials while team B prepares to install the fixture. Team B then installs the electrical components to the fixture while team A provides materials to team B, as needed. Task ID#: 100471

Work with others to pull an electrical cable. To perform the task, the electricians work together to identify the correct materials for the job and to move a cable to the correct spot on the construction site. They gather the appropriate tools and run fish tape through the conduit. A rope is attached to the fish tape and pulled through the conduit. A cable is attached to the rope and lubricants are applied to the cable. Next, the cable is run through the conduit and then cut. Task ID#: 100481

Work together to install wire into a conduit. To perform this task, the electrician verifies that the components (wire, conduit) are correct for the job requirements. He or she then establishes coordination at both ends of the conduit (i.e., reaches agreement on the use of common technical terms). The electrician then installs pulling apparatus into the conduit, secures wire to fish tape, and adds lubricant to the wire. The electrician uses radio signals to coordinates the start of wire pulling. The wire is then pulled, and is cut at the end when pulling is completed. Task ID#: 100321

Teaches Others New Skills (F11)

Teach apprentices how to properly bend pipe. To perform the task, the journeyman (an electrician who is certified) first uses general terms to explain to the apprentices the task of pipe bending. He or she then explains in detail the equipment used for the task and the math involved in calculating the proper bend. Next, the electrician demonstrates to the apprentices how to bend pipe. After the demonstration, he or she watches the apprentices develop a pipe-bending formula and then bend pipe themselves. Task ID#: 110471

Teach apprentices how to move a switch gear. To perform the task, the electrician explains to the apprentices the safety precautions that should be taken. He or she then identifies the tools and equipment to be used to move the switch, and shows the apprentices how to apply the straps needed to secure the switch gear and how to clean the area for movement. Next, the electrician works with the apprentices to place rollers on the switch gear, and demonstrates how to set up the wrench. Further, the electrician attaches the cable to straps on the switch gear, and then installs the wrench while the apprentices move the roller and keep the route clean. Task ID#: 110481

Explain to a trainee how to troubleshoot a motor. To perform the task, the electrician verbally goes through the electrical troubleshooting procedure. He or she explains what to do and why for each step in the process. The electrician starts the repair, explains the procedure, and answers any questions. The trainee does the next applicable repair while the trainer watches and reviews each procedure. Task ID#: 110541

Work with an apprentice to install motor starter controlling equipment. To perform this task, the electrician assesses the knowledge level of the apprentice. He or she shows the apprentice the equipment and explains the relationship between the blueprints, specifications, and physical equipment. The electrician demonstrates the installation of wiring to start/stop switches and details (marks) the blueprint as the wires are connected. The electrician then has the apprentice install the wire, and supervises the apprentice's work and provides feedback. Task ID#: 110321

Identify new methods for installing computer-operated lighting. To perform the task, the senior electrician observes that an electrician is reluctant to work with a computer, and talks to the electrician about learning new technology. The senior electrician then demonstrates the new computer system and relates its functions to everyday topics. Finally, the senior electrician helps the electrician to understand the equipment as it is installed. Task ID#: 130471

Serves Clients/Customers (F12)

Explain to a potential customer the different options for a certain electrical work job. To perform the task, the electrician obtains information about the customer's needs—for example, that he or she wants fluorescent lights that dim. The electrician analyzes possible methods for achieving this goal, selects the best approaches, and presents them to the customer. Task ID#: 120471

Install an uninterrupted power supply for a business computer. To perform the task, the electrician arrives at the business site, receives the request from the customer, and examines the physical site and the circuit boards. The electrician then gathers materials and tools and coordinates with helper(s) the pulling of the cable. The electrician explains to both the customer and the assistant(s) information about the wiring segments, and then installs all cable, fuses and connectors. Next, the electrician informs the customer that the system is ready to be tested, and explains the options and warranties to the customer. Task ID#: 120481

Check copy machine circuits while on a service call. To perform this task, the electrician talks to the client (e.g., the secretary) about the nature of the problem. He or she troubleshoots the circuit by connecting the voltmeter to the circuit, turning on different appliances in the office, observing the effect on the circuit, and identifying the overload to the circuit. The electrician draws a schematic of the electrical system and identifies the problem with the circuit. Finally, he or she explains the problem to the client and suggests solutions. Task ID#: 120321

Works with Cultural Diversity (F15)

Deal with personal hygiene issues resulting from the cultural habits of a new group of employees. To perform the task, the electrician understands that the behaviors (i.e., infrequent showers) of foreign-born workers may be different from the behavior of the majority of the employees because of cultural differences. The senior electrician then explains to the rest of the crew the nature and origin of the differences. Task ID#: 150471

Understands How Systems Work (F17)

Troubleshoot the electrical portion of the environmental control system in order to deal with a cold room. To perform this task, the electrician inspects the thermostat in the cold room to see if the system is on and to check for power at the heating unit. The electrician then troubleshoots the heating unit, reading the electrical schematic for the unit. Task ID#: 170461

Install an energy management system in a building. To perform the task, the electrician reviews the mechanical specifications and drawings, and consults with a mechanical contractor to determine the type of equipment to be installed. The electrician then determines any additional equipment needed and coordinates with others to obtain a work station time. Task ID#: 170481

Know who to talk to in order to get needed information on equipment. To perform this task, the electrician receives a job order requesting the installation of a large cable system. The electrician contacts the requestor to get specific information on the job needs and, if necessary, contacts engineering to gather additional information. Finally, the electrician may go to an "out-of-chain" person for a specific tool that is not normally available but is necessary to perform the job. Task ID#: 170541

Anticipates and Identifies Consequences (F18)

Install fans in closet in a way which minimizes the possibility of electrical failure. To perform this task, the electrician must assemble the needed materials, install the basket for the fan, and then install the fan—taking care to avoid actions which would cause electrical failure. Task ID#: 180461

Prepare to install a fire prevention system in a building. To perform the task, the electrician reviews the job specifications for the fire prevention system and develops a Request for Information for the system. The electrician gives the Request for Information to the general contractor for a response and then gathers the appropriate materials. After receiving a response from the general contractor, the electrician compares it with the work specifications and drawings, and then makes a final plan for installation of the fire prevention system. Task ID#: 180481

Monitors and Corrects Performance (F19)

Install a voltage monitor to monitor the power coming into the facility. To perform this task, the electrician is first notified about a power problem by the owner of the facility, and then determines that the power system needs to be monitored for fluctuations. The electrician installs an amp monitor onto the external power system, then reviews the taped data coming from the monitor and notifies the owner of specific problems and possible options. Task ID#: 190461

Monitor and correct the energy management system in a new building. To perform the task, the electrician identifies a problem area in the system (e.g., erratic temperature). He or she disconnects the controls for the affected area and attaches measurement controls to the circuit. Next, the problem area is identified and problematic equipment is disassembled. Finally, the electrician troubleshoots and replaces it and retests the system. Task ID#: 190481

Selects Appropriate Technologies (F20)

Decide upon the specific lighting system to be installed based on the owner's goals. To perform this task, the electrician researches manufacturers' catalogs for the range of lighting systems offered, checks the availability of the items and decides which items are appropriate to the owner's needs. From this information, electrician develops a list of recommended systems and presents the options to the owner. Task ID#: 200461

Determine the appropriate fire-alarm sensor for a job. To perform the task, the electrician reviews the work specifications and blueprints to see if sensor and alarm match the actual requirements. The electrician generates a Request for Information on problem areas and talks to the electrical engineer and the general contractor before recommending an appropriate alarm and sensor. Task ID#: 200481

Select the appropriate piece of test equipment to solve a problem. To perform the task, the electrician identifies the problem (e.g., the motor will not run) and realizes that a power fuse has blown, indicating a possible short circuit. The electrician chooses either an ohmmeter (resistance to ground) or a mogger (generator of higher voltage to determine short circuits) to use in testing. Task ID#: 200541

Determine the correct type of metering equipment to install at a substation on an army facility (i.e., determine if metering equipment will be installed above or below the ground). To perform this task, the electrician inspects the physical site for installation parameters (i.e., how big a hole will be needed if the meter is installed underground). Then he or she performs a cost benefit analysis (i.e., determines the costs of installing the meter underground versus building a structure to insulate the meter above ground). The electrician the selects the installation type and site (i.e., fixed underground cable). Task ID#: 200321

Uses Machines to Monitor/Perform Tasks (F21)

Use the core drilling machine to drill through concrete. To perform the task, the electrician lays out the location for drilling with the use of blueprints, measures, and paint, and then coordinates the drilling with the other tradespeople involved. Next, electrician sets up the core driller and drills the needed holes. Task ID#: 210461

Monitor mainframe circuit breaker's short circuit sensors. To perform the task, the electrician identifies a circuit board to be tested and monitored. He or she reviews the circuit board requirements and sets up test equipment. Next, the electrician tests and monitors all aspects of the circuit and then recalibrates it. Task ID#: 210481

Use analog, digital, or recording voltmeter to monitor the power supply of computers going from a central computer facility to branch schools. To perform this task, the electrician interviews a computer systems operator for the exact details of the problem, and conducts a physical inspection of the problem-causing equipment. The electrician then connects a voltmeter to the problem equipment and connects recording equipment to the circuits. The electrician analyzes the recorded data and inspects the circuit that is causing the problem. Finally, the electrician corrects the physical problem with the circuit. Task ID#: 210321

Maintains and Troubleshoots Technologies (F22)

Troubleshoot the functioning of telemetry control systems in a water treatment plant. To perform this task, the electrician checks the maintenance schedule for specific maintenance requirements. The electrician identifies the tools required and gathers tools and parts (e.g., transmitters, pressure gauges, and wrenches). When on site, the electrician records data from the transmitter. The electrician installs the test set and runs an initial test of the transmitter equipment to determine if the electrical input is consistent with the signal generated by the transmitter. Then, using simulated signals that the transmitter would normally send, the electrician re-evaluates the transmitter. After assessing the transmitter's ability to transmit signals, the transmitter is retested. Once it is determined that the transmitter is functional, the equipment is disconnected. Task ID#: 220321

Numerical Drill Operator (Based on Four Interviews)

Numerical drill operators produce quality parts from the tooling information provided. This involves obtaining tools and programs to do the job, loading the machine with the tools, preprogramming the computer to revise a program for manufacturing pieces, verifying a computer program to ensure that the program will result in manufacture of appropriate parts, interpreting the paperwork needed to do the job, making off-sets and tool sets, and preparing for the actual run. The operators run the machine that produces the parts and conduct statistical process control procedures to ensure quality. Operators also maintain the machine with oil and coolants, and clean off chips from parts.

Functional Skills	Mean	Std. Dev.
F19 Monitors and Corrects Performance	4.50	.58
F09 Employs Computers	4.50	.58
F07 Converts Information	4.25	.96
F21 Uses Machines to Monitor/Perform Tasks	4.25	.96
F06 Prepares Information	4.00	.82
F18 Anticipates and Identifies Consequences	4.00	.82
F22 Maintains and Troubleshoots Technologies	4.00	.82
F10 Participates as a Member of a Team	3.75	.96
F01 Manages Time	3.50	.58
F05 Identifies Information	3.50	.58
F11 Teaches Others New Skills	3.50	.58
F16 Questions the Status Quo	3.50	.58
F12 Serves Clients and Customers	3.50	.58
F20 Selects Appropriate Technologies	3.25	1.50
F17 Understands How Systems Work	3.25	.50
F13 Influences an Individual or Group	3.25	.50
F14 Negotiates to Arrive at a Decision	3.25	.50
F15 Works with Cultural Diversity	2.75	.50
F08 Interprets Information	2.50	.58
F03 Manages Material and Facility Resources	2.00	1.15
F02 Manages Financial Resources	1.25	.50
F04 Manages Human Resources	1.25	.50

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E16 Conscientiousness	4.75	.50
E01 Mathematical Skills	4.50	.58
E11 Ability to Learn	4.00	.82
E06 Reasoning Skills	4.00	1.41
E05 Listening Skills	4.00	.82
E03 Reading Skills	4.00	1.15
E12 Work Orientation	4.00	.00
E13 Self Confidence	4.00	.00
E04 Speaking Skills	3.75	1.26
E15 Cooperation	3.75	.50
E08 Decision Making	3.50	.58
E09 Problem Solving	3.50	.58
E07 Creative Thinking	3.25	.96
E10 Representing Information	3.25	.96
E02 Writing Skills	3.00	.82
E14 Social	3.00	.82

Job: Numerical Drill Operator

Manages Time (F01)

Be conscious of time elements involved in completing tasks. To perform this task, the numerical drill operator becomes aware of the fact that a part must be done within a certain time frame. The operator looks ahead for the proper tooling to complete the next step. The operator needs to know when to make, change and remove off-sets, and how to perform tasks in the proper order. Task ID#: 010521

Schedule the time and priority of relief work. To perform the task, the numerical drill operator checks to ensure that all machines have enough tools. Further, the operator assesses the workload of each machine and makes a mental note of what has to be done. The operator finds out which machines need relief and schedules time for this relief. The operator checks stock to see what needs to be moved. Finally, the operator unloads the conveyers. Task ID#: 010561

Identifies Information (F05)

Take the dimensions of a camshaft being tooled and record readings on a chart. To perform the task, the numerical drill operator takes the part (camshaft) from the CNC machine and puts it on a workbench, resting it on a nest or master. The operator takes a gauge and ensures that it is set up properly, using a master (pre-set dimension representing a camshaft). The drill operator then checks the dimensions of the part, using several gauges. The operator makes any necessary adjustments to the machine based upon the gauge readings. For statistical process control purposes, the machine is checked after five consecutive parts have been tooled (twice a shift). The machine is loaded again and cycled. The next part worked on that machine is checked to make sure that the adjustments are correct. Task ID#: 050571

Consult a blueprint to determine the work to be performed. In order to perform this task, the numerical drill operator first finds out what piece needs work. The next step is to look at operation sheets before starting work. Then the tool operator consults with the engineer to clarify the work required, if necessary. After that, the tool operator sets up the equipment, loads the part, and runs the operation. The last step is to check and to verify every piece against the blueprint. If the dimension is incorrect, then the operation must be run again. Task ID#: 050531

Prepares Information (F06)

Transfer information to the machine. To perform the task, the numerical drill operator looks at paperwork in order to obtain the tools and programs needed to perform the job. This information is transferred from paper to the control (a computer). The operator checks the performance of the machine on the part by using a gauge to measure the actual dimensions of the job against written specifications with a gauge. Task ID#: 060521

Use five consecutive pieces to measure the machine specifications and make an SPC chart. To perform the task, the numerical drill operator measures five consecutive pieces for specifications. The operator puts the readings on a worksheet. Next, this information is transferred to an SPC chart as a line graph. The numbers are plotted and arranged in a large enough range to make the line graph. If the operator notices that points are out of control, he or she seeks help from appropriate sources. Task ID#: 060571

Converts Information (F07)

Read equipment gauges and make adjustments as necessary to the work process. To perform the task, the numerical drill operator takes a gauge reading, makes adjustments in the computer program, runs another part of the same kind, and takes another reading to ensure that proper tolerance is maintained. Task ID#: 070561

Accurately read statistical samples and display information on a SPC chart. To perform the task, the numerical drill operator takes gauge readings from five sample pieces (on lathes, mill cutters, and lobe grinders) at least once a day. The operator adds up the readings and shows the variation and the average. The chart readings are put into line graph form. These graphs are sent to the front office, which checks the machines once a day. Finally, the operator corrects the machines that display deviations from tolerance. Task ID#: 090561

Work together to try to eliminate scrap metal. To perform the task, the numerical drill operators collect data on where and how scrap is created. They sort the data to determine the origin of the majority of the scrap, and go to the identified machine. Using the machine as a basis, they create a fishbone diagram to analyze the cause of the scrap, and generate a permanent solution to the problem. Task ID#: 100571

Employs Computers (F09)

Use a computer for information conversion. To perform the task, first a programmer pre-programs the controller (a computer) with general instructions. The numerical drill operator inputs any job specifics, such as snub number, into the controller. The operator then presses the activate pattern and the computer downloads the controller software. As the operator spells out items into the controller, the controller performs the task of converting this information into a machined part. At the end of each item, the operator goes back to home (on the computer) or exits the computer in order to perform a tool check. Task ID#: 090521

Use the computer keyboard to enter information that adjusts equipment. To perform the task, the numerical drill operator accesses the computer to change the off-sets for an oversized piece. The operator tries out the part to re-check it and makes any other necessary adjustments (i.e., replacing a broken tool). Finally, the drill operator runs the piece. Task ID#: 090571

Use the computer to run the operation. In order to perform this task, the numerical drill operator first turns on the control and then downloads a program from the main VAX to the computer. The operator selects the proper program from 20 different screens; synchronizes the machine to the computer; and uses the computer to verify, in accessible dimensions, where a gauge will not fit. The operator finally backs up, reruns, and searches forward to perform tasks. Task ID#: 090531

Participates as a Member of a Team (F10)

Employ a team to solve a problem (e.g., a tool is constantly breaking). To perform this task, the numerical drill operator cuts the machine's performance level from 100% to 50 or 75% to keep the tool from breaking. Once the operator runs tests and understands at what level the tool will run properly this information is given to the programmer. The programmer and the operator then solve the problem by changing the tool. Once the change is made, the tool is tested again and the process is repeated, if necessary, until the tool works. Task ID#: 100521

Teaches Others New Skills (F11)

Cross-train other numerical drill operators. To perform the task, the numerical drill operator selects newer employees for cross-training, decides how they should be trained, and works with them for one to two weeks as they become familiar with the procedure. Eventually, the newer employees are allowed to work alone. Task ID#: 110571

Train other machinists in the operation of the numerical drill equipment. In order to perform this task, the numerical drill operator helps the trainee to feel at ease in the learning environment by letting the trainee know that everyone makes mistakes. The next step is a detailed run through of the start-up procedure for numerical drill machinery. The operator then takes up to a week to perform each process for the trainee, allowing the trainee to perform each task immediately after having shown him or her the procedure. The last step is then to coach the trainee and allow for a gradual transition of responsibility. Task ID#: 110531

Serves Clients/Customers (F12)

Satisfy the customer's needs. To perform the task, the numerical drill operator communicates with the customer to determine any problems or changes (such as defective material). The operator makes any adjustments necessary and notifies the supervisor that the material being used may be defective. Any defective material is purged and put into a separate area. Next, the drill operator reruns the job or scraps it, as necessary. Finally, the operator checks with the customer to insure that the change has been made. Task ID#: 120571

Provide feedback to the design engineers on the difficulty of machining a part. In order to perform this task, the numerical drill operator explains to the engineer how the process is going. This means that the operator tells the engineer which operation is occurring on which area of a part at each step in the process. The operator explains how long each step will take and how difficult it is to do. Eventually, the engineers may redo the design based on the feedback from the programmer and the machinist. Task ID#: 120531

Negotiates to Arrive at a Decision (F14)

Discuss departmental problems with other operators and supervisors. To perform the task, the numerical drill operator identifies a problem and determines if it is operator-based or mechanically-based. With an operator problem, the person running a machine is not making adjustments or changing tools when appropriate. A mechanical problem may be a result of poor maintenance or repair. The problem is discussed with the supervisor in order to arrive at a solution. The supervisor goes to the appropriate problem source to resolve the issue. Task ID#: 140561

Questions the Status Quo (F16)

Deal with the problem that exists when there is a difference between what is on paper and what works. To perform this task, the numerical drill operator identifies a machine problem that results from an error in the software program. The operator approaches the programmer with these findings and attempts to convince him or her that a change needs to be made. Either the programmer or the supervisor will then make a decision about the change, depending upon the situation. Task ID#: 160521

Deal with problems that arise and continue to question or challenge lack of action. To perform the task, the numerical drill operator notices that a machine which has broken down also has some major oil leaks which have not been addressed in the past. The operator requests that the oil leaks be repaired while the machine is down for the other repairs. If no action is taken to repair the leaks, the drill operator continues to request action, including calling on the vendor to make major repairs. Action is eventually taken, as a result of constant prodding. Task ID#: 160561

Understands How Systems Work (F17)

Know how the machine works so that the computer system is not ruined inadvertently. To perform the task, the numerical control drill operator punches into the computer a number that is not correct for the type of screen being used. (A wear screen makes one-at-a-time adjustments and a geometry screen makes multiple adjustments, and different numbers are required when dealing with these.) As a result, the operator crushes the head and breaks a tool, causing the machine to be down for four hours. Other individuals trace the mistake. Task ID#: 170561

Anticipates and Identifies Consequences (F18)

Anticipate movement of the machine in a direction different from that which is programmed. To perform the task, the numerical drill operator notices that the machine is operating with a tool which is incorrect for the item being run, and sees the incorrect tool coming into a position to be cut or otherwise worked on. The operator hits the stop button, backs up the machine to rerun the item, resets the tools, and checks the turret for tool position. Finally, the item is rerun. Task ID#: 180521

Read a computer program to anticipate the machine's next move and to determine correctness. In order to perform this task, the machine tool operator first calls up the program. Then the operator reads the program and stops the machine, if the indicator shows only a one-inch distance. After that, the operator presses the clear button, returns to the home position, and starts over with the set-up verification. Task ID#: 180531

Listen for sounds of equipment operation to anticipate and prevent equipment down time. To perform the task, the numerical drill operator listens for variations in normal machine sound when running pieces. If the operator feels vibrations when none had occurred previously, he or she stops the machine and checks out the situation. Tools are replaced, when appropriate. Further, the operator refers mechanical problems to maintenance and notifies the supervisor that the machine will be down. Finally, the operator remains aware of all possibilities leading to down time. Task ID#: 180561

Selects Appropriate Technologies (F20)

Make a quick judgment as to whether a programmer has indicated the correct tool for the given task. To perform this task, the numerical drill operator sees an obvious error in tool choice at the part-loading point. The operator contacts the programmer and reveals the mistake. The programmer then corrects the program and the operator runs the task. Task ID#: 200521

Look at a camshaft and select the appropriate tools to do the job. To perform the task, the numerical drill operator checks out all machines to see which ones are running and which ones need repair, and how the situation will affect the day's production. All machines are checked for condition (e.g., to see if they need oil) and missing tools are replaced. The operator checks the machine counter for wear and tear on tools, for replacement, and for the time of day when the job should be completed. Finally, a determination is made as to the type of tools to be used on a product, depending on the stage of production. Task ID#: 200561

Uses Machines to Monitor/Perform Tasks (F21)

Accurately determine the output and correction of a machine in order to obtain optimal functioning. To perform the task, the numerical drill operator sets up the machine accurately with a different tooling and makes any necessary adjustments. The operator solves any machine problems, explains their nature to the maintenance crew, and detects errors in programming through inspection, for example, frequent tool breaking due to incorrect rpm adjustments. Task ID#: 210561

Offset Lithographic Press Operator (Based on Four Interviews)

Offset lithographic press operators print job orders that look like the artwork on which it is based. This includes gathering materials (ink, paper, metal plates), checking the proof against the original to ensure that corrections are made, hanging the plates and setting up the machine to operate, setting the "ink fountains" for correct tone and consistency, and ensuring that the press sheets are stripped correctly. The operators also ensure that the paper folds correctly, run the press after approval from the plant manager, and maintain the press.

Functional Skills		Mean	Std. Dev.
F19	Monitors and Corrects Performance	4.75	.50
F10	Participates as a Member of a Team	4.75	.50
F21	Uses Machines to Monitor/Perform Tasks	4.75	.50
F09	Employs Computers	4.75	.50
F01	Manages Time	4.25	.96
F18	Anticipates and Identifies Consequences	4.25	.50
F22	Maintains and Troubleshoots Technologies	4.25	1.50
F06	Prepares Information	4.00	.82
F20	Selects Appropriate Technologies	3.75	1.50
F17	Understands How Systems Work	3.75	.50
F11	Teaches Others New Skills	3.75	.50
F05	Identifies Information	3.75	.96
F07	Converts Information	3.50	1.29
F13	Influences an Individual or Group	3.50	1.29
F14	Negotiates to Arrive at a Decision	3.25	.96
F16	Questions the Status Quo	3.00	1.41
F15	Works with Cultural Diversity	3.00	1.41
F12	Serves Clients and Customers	3.00	1.63
F03	Manages Material and Facility Resources	2.75	.50
F08	Interprets Information	2.25	1.50
F04	Manages Human Resources	1.75	.50
F02	Manages Financial Resources	1.25	.50

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E16 Conscientiousness	4.75	.50
E11 Ability to Learn	4.50	.58
E12 Work Orientation	4.50	1.00
E13 Self Confidence	4.50	1.00
E15 Cooperation	4.50	1.00
E14 Social	4.25	.96
E06 Reasoning Skills	3.75	.96
E08 Decision Making	3.75	1.89
E09 Problem Solving	3.75	1.26
E05 Listening Skills	3.50	1.73
E10 Representing Information	3.50	1.73
E07 Creative Thinking	3.25	.96
E03 Reading Skills	3.25	1.71
E04 Speaking Skills	3.00	1.41
E01 Mathematical Skills	3.00	1.63
E02 Writing Skills	1.75	.50

Job: Offset Lithographic Press Operator

Manages Time (F01)

Perform each pressroom task in as timely a manner as possible in order to ensure that high quality is provided to the customer. In order to perform this task, the offset lithographic press operator must set up the night press room properly, including purging the press of colors from prior editions to prepare for the new color, plating the press, setting the folding machine up, and ensuring that page cut-offs are correct and that plates are on correctly. Finally, the operator must double check for any errors which might have been made. Task ID#: 010501

Identifies Information (F05)

Research the color book for proper ink mixes (particularly around the holidays). In order to perform this task, the offset lithographic press operator must find the appropriate color in the color book. The operator then goes to the ink mixing room, finds the inks, and mixes them in a machine. The operator then puts them in a pressurized canister which is hooked to an ink feed line. The line hooks into an ink pack, which feeds into the press rollers that place the ink on the pages. Task ID#: 050501

Prepares Information (F06)

Prepare the printing job for a press run and convert it to the final product. To perform this task, the offset lithographic press operator prepares the paper and press for the run. The operator puts plates on the press and then inks the fountains. Next, a color meter is employed to set the color. The press operator then uses a computer to input set-up time for the project, performs the press run, and inputs the run time into the computer. Next, the press operator completes and folds the job and inputs completion time into the computer. Finally, a computerized printout of the actual time/cost to customer is obtained and compared with the estimated job time to reveal any discrepancies. Task ID#: 060491

Collect all materials based on a job order before beginning the job so as not to waste resources after the job begins. In order to perform this task, the offset lithographic press operator must first retrieve the job jacket and study its materials requirements. Based on this information, the operator then obtains the prepared plates, sets up the press for ink and paper, places the plates on the press, and sets up the press for the correct paper size. The operator next checks the proof copy to insure that corrections have been made, and then obtains the approval of the supervisor to run the job order. Task ID#: 060551

Converts Information (F07)

Utilize job order information to set up a press for a new job. In order to perform this task, the offset lithographic press operator must first clean the press roller of old color with a solvent. Then, the operator adds new color in the density required for the new job based on information obtained from customers, and sets up the press with paper, plates, and ink. Finally, the operator runs the new job, while checking for color consistency. Task ID#: 070551

Interprets Information (F08)

Communicate the fact that there is a problem in the printing operation. In order to perform this task, the offset lithographic press operator must periodically check the product. If the operator notices that pages are blank, the operator tells the mailroom staff that the papers they are currently receiving are to be rejected. The operator then turns the counter off and communicates the error to the foreman. The operator next receives communication from the mailroom about the severity of the problem by identifying how many bad copies have been produced. The operator must then fix the problem and restart counting pages. Task ID#: 080511

Employs Computers (F09)

Use the computer to track the time elapsed for each segment of the printing project in order to accurately provide billing information to the customer. In order to perform this task, the offset lithographic press operator must first use a special keyboard to punch in the start time for each part of a printing job. When each part ends, the operator sends the information to the mainframe computer, which stops the time for that part of the job. The operator repeats this sequence for each step of the job. At the conclusion of the job, the computer totals the hours and costs for the whole job by segment, and the customer receives a printout of this record. The operator's supervisor then checks the actual recorded time elapsed by segment against the job estimate to check for significant variances and related problems. Task ID#: 090551

Make the necessary quality control adjustments to run the press. In order to perform this task, the offset lithographic press operator must call each job up on the computer before running the press job. The operator then checks the first press runs for consistency and uses the computer to adjust for any inconsistencies found. The operator continues to monitor the press runs throughout the night job. Task ID#: 090511

Interpret different displays of a Modular Press Control System (MPCS), including ink and dampening levels. In order to perform this task, the offset lithographic press operator must perform the "make-ready" function on the computer; run the computer's controls (including ink and dampening levels) and registration guidelines; set the press' tension on the computer; and set the compensators for cut-off. Task ID#: 090501

Participates as a Member of a Team (F10)

Operate as a part of a team to complete a job. To perform the task, the job order is brought to the press room, with artwork, and the supervisor discusses options for running the job with the offset lithographic press operator. Strippers and binders also provide their input into the process. Finally, the press operator takes the new input and runs the job. Task ID#: 100491

Work closely with colleagues in other departments to avoid problems and costly time overruns. To perform this task, the offset lithographic press operator must first speak with the art and negative shop to understand new printing jobs. The operator then compares plates and colors to set up the press. Next, the operator discusses potential and actual problems with the supervisor. Finally, the operator fits the job together, runs the presses, and ask for help when necessary. Task ID#: 100551

Work together with one's colleagues when the press first starts running in order to ensure the paper is running efficiently. To perform this task, the folder operator starts the press running, the black-ink operator checks for off-color pages, the color operators ensure that the color is in the register and of good quality, and the reel-room operators keep the other operators informed of roll changes. All of these jobs are performed before folding the papers as quickly as possible to ensure that the paper achieves a reliable quality in an appropriate amount of time. Task ID#: 100511

Assist a press operator who is experiencing improper paper inking. To perform this task, the assisting the offset lithographic press operator must evaluate the ink's water balance and help his/her fellow press operators make the proper adjustment. The adjustment must be made in a timely fashion to limit paper waste. Task ID#: 100501

Make use of the "buddy system" to check a colleague's mock-up in order to anticipate problems. To perform this task, the offset lithographic press operator must first look closely at the plates of a colleague's job to check for problems. The operator then suggests possible improvements to the colleague's work and overlooks the trial run to ensure that the process is set up properly. Lastly, the operator checks the colleague's printing job when finished to ensure appropriate quality. Task ID#: 110551

Teaches Others New Skills (F11)

Train a press operator how to operate a press. To perform the task, the offset lithographic press operator first teaches the helper how to load and size paper. Next, the helper is taught the procedures for putting on plates, inking the press, and feeding the press. Finally, the press operator supervises the press running until the helper has demonstrated proficiency and can perform the press-run operation without assistance. Task ID#: 110491

Train apprentices. In order to perform this task, the offset lithographic press operator must familiarize the apprentice with the press room's equipment and functions, stress the importance of safety in operating the equipment, help the apprentice perform various printing processes, troubleshoot the apprentice's work, train the apprentice in necessary computer skills, help the apprentice learn the buddy system, and monitor the quality of the apprentice's work to ensure that it meets quality standards. Task ID#: 110501

Serves Clients/Customers (F12)

Work with customers to ensure their approval before a printing job is run. In order to perform this task, the offset lithographic press operator must first set up a time when it is convenient for the customer to look at the relevant proof sheet. When the customer arrives, the press operator makes suggestions about possible improvements. If the customer approves the changes, a new proof sheet is made, which the customer must also approve. The operator finally runs some sample sheets for customers to take with them. Task ID#: 120551

Influences an Individual or Group (F13)

Create an improved method of performing a task. In order to perform this task, the offset lithographic press operator must first explain to his or her colleagues the method of improvement and convince them of its efficacy by demonstrating the process. The operator must then perform the same role with the foreman, and the foreman must in turn convince the pressroom manager, who will make the change. Task ID#: 130511

Negotiates to Arrive at a Decision (F14)

Talk with the operator's supervisor about how to rerun a printing job which has been problematic in the past. In order to perform this task, the offset lithographic press operator must first identify a rerun as a problem job. The operator then talks with the supervisor to suggest changes which might make the job run more smoothly and discusses the time dimensions involved in making the suggested changes. The operator must then convince the supervisor to approve a short-term cost excess in the interests of long-term cost savings. Task ID#: 140551

Works with Cultural Diversity (F15)

Make sure that expertise and not ethnicity is the determining factor for a work assignment. To perform the task, the offset lithographic press operator determines what kind of expertise is needed to perform a job and who has the best qualifications for running the job. The operator then asks that person to handle the job, regardless of his or her ethnic or racial background. Further, the operator makes sure that no ethnic or racial slurs enter the work place and encourages all employees to work together. Task ID#: 150491

Questions the Status Quo (F16)

Suggest a change in existing press room procedures in order to increase printing efficiency. As an example of this task, the offset lithographic press operator challenge clean-up operation procedures that are taking 70 minutes. The operator suggests to the group as a whole that it split up to clean the presses, which reduces clean-up time to 45 minutes. This new plan is then presented by the group to the supervisor, who approves it. When the proposal has been accepted, it becomes institutionalized. Task ID#: 160501

Understands How Systems Work (F17)

Go through the proper steps in order to make a decision concerning whether or not to varnish a job. To perform the task, the offset lithographic press operator reads a job order for instructions and determines that it provides no guidance concerning whether or not to varnish a job. The press operator follows several steps in obtaining the needed information including asking the supervisor for further instructions and looking at old job orders to see if varnish was used. The press operator determines that an old job order has no instructions and goes to the supervisor, who makes the final decision to varnish. The press operator runs the order and varnishes the job. Task ID#: 170491

Understand at the beginning of one's employment how the print shop is organized and operated. In order to perform this task, the new press offset lithographic operator must learn the shop's organizational structure and procedures, as well as the job order procedures, where supplies are kept, who the supervisor is, and where to go for information. Task ID#: 170551

Understand the press operation's technical aspects in order to save time on a press run. In order to perform this task, offset lithographic press operators must check on the course of the plate flow. If the pre-press is late or the mailroom has a problem, they must do the color registration to save time. Task ID#: 170501

Anticipates and Identifies Consequences (F18)

Determine why the feeder on the press is not running and take action to correct it. To perform the task, the offset lithographic press operator determines that the feeder is not operating properly. The operator identifies that the problem is either a clogged feeder or an air line problem. From this identification, the operator determines the appropriate action to take (either replace the part or clean it). If the problem is complex, the press operator calls in the machinist or electrician, who makes repairs or performs maintenance so the machine will be able to run jobs. Finally, the operator restarts the machine. Task ID#: 180491

Anticipate when press machine parts will wear out and order replacement parts in advance in order to avoid machine down time. In order to perform this task, the offset lithographic press operator must check equipment regularly to evaluate the condition of press parts. The operator must pay particular attention to obvious machine noises and to parts that are not operating properly. When appropriate, the operator repairs the equipment himself or calls the necessary machinist or mechanic. The operator must attempt to keep the machine running on its old parts until new spare parts arrive; first the operator must make sure that the needed new parts have been ordered. Task ID#: 180551

Ensure that all printing press systems are thoroughly checked against the operations checklist, so that time is not lost and paper is not wasted. In order to perform this task, the offset lithographic press operator must decide whether the center slot on the page needs to move one notch on the press in order to create a perfect print. If the slot needs moving, the press operator must move it. In anticipation of needing to perform this adjustment, the pressman may ask the foreman to stop the press. Task ID#: 180511

Gather compensator valves (cut-offs) to prepare them for a future run of the same basic layout. In order to perform this task, the folder operator must record the compensator run and appropriate valves at the end of a night run, particularly if pre-set valves differ from the night's end valves. Task ID#: 180501

Monitors and Corrects Performance (F19)

Ensure that a print job is running consistently. In order to perform this task, the offset lithographic press operator must monitor the ink color to ensure that it remains consistent and must check for dried ink on an image or for paper lint. If the operator finds a problem, he or she must remove the flaw from the press. Task ID#: 190551

Recognize an improper flow of black ink and correct it. In order to perform this task, the offset lithographic press operator must identify a need to regularly tone down the black ink. If a need is identified, the operator commands the computer to tone it down through use of a regular pre-set valve. This automatically lowers the level of the black ink, thus eliminating the need for further adjustments. Task ID#: 190511

Monitor the running of the press. In order to perform this task, the offset lithographic press operator first prepares the press to run, then monitors its performance all night by checking the controls and making necessary adjustments. All adjustments are stored in memory for future reference. Task ID#: 190501

Check constantly to ensure that paper is aligned properly. In order to perform this task, the press operator must review an operations checklist, physically place the plates on the press, and start the press. The operator then makes sure that the page cut-offs are cornered, the rolls are properly aligned, and the paper is clean. Next, he or she makes a decision about whether the papers are ready to save. If so, the operator must constantly monitor them after every 500 copies. Task ID#: 050511

Trade, Transportation, and Communications

Inside Equipment Technician (Based on Four Interviews)

Inside equipment technicians install and maintain customer circuits and service. This involves conducting line (circuit) testing, assessing multiple automated databases to obtain information about when orders are due, testing circuits and other equipment to determine causes of malfunction, and troubleshooting and tracking customer complaints. Some technicians work primarily with software (i.e., they build the customer's software and handle software-related trouble reports). Inside equipment technicians provide support to field people in clearing their hardware problems by feeding them appropriate information and by interacting with control centers to deal with customer reports.

Functional Skills		Mean	Std. Dev.
F06	Prepares Information	5.00	.00
F05	Identifies Information	4.75	.50
F21	Uses Machines to Monitor/Perform Tasks	4.75	.50
F09	Employs Computers	4.75	.50
F19	Monitors and Corrects Performance	4.50	.58
F22	Maintains and Troubleshoots Technologies	4.50	1.00
F17	Understands How Systems Work	4.25	.96
F18	Anticipates and Identifies Consequences	4.25	.96
F12	Serves Clients and Customers	4.25	.96
F10	Participates as a Member of a Team	3.75	.50
F08	Interprets Information	3.75	.50
F01	Manages Time	3.75	1.89
F15	Works with Cultural Diversity	3.50	1.29
F20	Selects Appropriate Technologies	3.50	1.29
F07	Converts Information	3.00	.82
F11	Teaches Others New Skills	3.00	.82
F03	Manages Material and Facility Resources	2.75	1.71
F16	Questions the Status Quo	2.50	.71
F14	Negotiates to Arrive at a Decision	2.50	.58
F13	Influences an Individual or Group	2.50	1.29
F04	Manages Human Resources	2.00	.82
F02	Manages Financial Resources	1.25	.50

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E10 Representing Information	4.75	.50
E09 Problem Solving	4.75	.50
E08 Decision Making	4.50	.58
E16 Conscientiousness	4.50	.58
E15 Cooperation	4.25	.50
E05 Listening Skills	4.00	.00
E13 Self Confidence	3.75	.50
E04 Speaking Skills	3.75	.50
E12 Work Orientation	3.75	.96
E03 Reading Skills	3.50	1.73
E14 Social	3.50	.58
E06 Reasoning Skills	3.50	1.73
E11 Ability to Learn	3.50	1.29
E01 Mathematical Skills	3.50	.58
E07 Creative Thinking	2.75	.50
E02 Writing Skills	2.50	.58

Manages Time (F01)

Complete date due orders as well as organize other daily activities. To perform the task, the inside equipment technician plans the order of activities based upon knowledge of task importance as well as actual time deadlines. First, date-due orders are pulled and completed; however, if a customer trouble-report comes in, the technician must drop all activities and attend to the problem. After completing date-due orders, the technician completes past projects that were put on hold, then requests new orders from the system. In the meantime, telephone calls are answered as they occur and the importance ratings of the tasks are constantly being balanced and rebalanced based upon updated information. Task ID#: 010611

Plan actions required to install a circuit for a customer. In order to perform this task, the inside equipment technician first reviews the schedule to see what circuits are due that day. The second step is to identify what work needs to be done on these circuits. The inside equipment technician must then review the engineering database for circuit information. This includes accessing customer and vendor information and all of the information pertinent to the path and installation of dead power lines. The technician then tracks down all the missing information, either by personal contacts or telephone calls. Any discrepancies (e.g., the order of repairs is different from what is expected, or deadlines have changed) must be resolved at this time, and the supervisor must be notified if the time allotted for an installation must be extended, shortened, or changed. These tasks must then be accomplished within the time frame established. Task ID#: 010231

Identifies Information (F05)

Analyze and solve trouble reports. To perform this task, the inside equipment technician receives a report that a customer cannot dial a certain facility. The technician calls the customer and asks for details of the problem, and asks other work groups how their function relates to the problem. Finally, information is assimilated and the technician attempts to isolate the cause of the problem. Task ID#: 050611

Research a hardware failure. To perform the task, the inside equipment technician identifies the hardware failure by noticing a bell alarm, which is followed by a quick message on the computer as to which piece of equipment and part of the switch has failed. The operator looks into the switch (office) to identify the problem. Finally, the technician looks up the trouble occurrence on microfiche. This gives the technician a history of the failure and location to help identify which part of the pack to change. Task ID#: 050601

Identify information in order to troubleshoot and repair customer service problems (using multiple database systems) and to test equipment. In order to perform this task, the inside equipment technician identifies the nature of the trouble (usually through complaints). This process includes accessing the database for the customer's trouble history. The next step is to access the engineering database to see how the circuit is supposed to work. After that, the technician tests the circuit to see if the trouble actually exists. This usually entails trying to duplicate the problem as it is described. The next step is to gather information and go into other systems to find solution options. This means the technician generates solution ideas and tests them on the circuit. Task ID#: 050231

Prepares Information (F06)

Complete the steps involved with inputting an order. To perform this task, a hard copy of the order is pulled from the computer and the important information is extracted. This information is then put into the relevant office (the switch which controls a certain geographical location of numbers) in a manner which makes the order executable. If necessary, the inside equipment technician will research the nature of the order and its documentation in manuals in order to understand how to properly input the order. The necessary information about an order is given on the form, but the technician must know what to do with the information so that the new order can begin functioning. Task ID#: 060611

Input customer complaint reports. To perform the task, the inside equipment technician totals the number of reports for a given day by taking this information from a faxed report that is sent daily. The operator then accesses the customer complaint file in the computer and adds the relevant information on complaints to keep the computer current and to change the index. Task ID#: 060601

Converts Information (F07)

Communicate troubleshooting progress to the next work shift. To perform this task, the inside equipment technician who is working on a customer trouble report writes down what has been done so far to identify and fix the problem, and who has been contacted for information (i.e., customer, other work groups). The technician relays this information (both verbally and in written form) to the next shift so that it can complete the task without repeating steps and wasting time. Task ID#: 070611

Interprets Information (F08)

Help provide a service (caller ID) to a large urban area. To perform the task, the inside equipment technician first has to reverse the privacy features that presently exist in the machine. Then, the technician takes the information which exists about how the caller

ID was taken out of the machine and writes it up in reverse order so that it can be put back in the machine. This information is passed on and explained to the next crew. Finally, the procedure is written out and a checklist is devised to explain when and how to do the procedures. Task ID#: 080601

Interpret test results and communicate the meaning of these results to the customer. In order to perform this task, the inside equipment technician first gathers trouble reports and customer information. Then the technician tests the relevant circuits and determines the nature of the problem. This troubleshooting entails restricting the testing to a narrow enough range of options to still be interpreted. The final step is to call the customer and communicate the information in a way that convinces the customer of the nature and extent of the problem (e.g., the technician must explain what falls within the company's responsibility, and must describe the tests that show where the problem lies). Task ID#: 080231

Employs Computers (F09)

Use the computer to input an order. To perform this task, the inside equipment technician first retrieves the order from a database, then verifies certain information found in the central office/switch by accessing the appropriate computer files. Finally, the technician inputs data to complete the order. Task ID#: 090611

Create a program to alter files and re-insert them. To perform the task, the inside equipment technician puts a given set of parameters into a file format. The operator writes a program to change the file in some way. (For example, a program is written to change file 19 from yes to no.) The modifications are saved in a separate file and the modified program is re-inserted. The machine's functioning is monitored to see if the change has worked. Task ID#: 090601

Access, retrieve, and input data about circuit installations to and from a computer system. In order to perform this task, the inside equipment technician must first log onto the computer, access the mainframe computer, and enter into the engineering database. The technician then inputs into the computer file information on which facilities the circuit is being assigned (this process updates the system). Task ID#: 090231

Participates as a Member of a Team (F10)

Work jointly with other technicians and management to solve customer problems. In order to perform this task, the inside equipment technician first collects the pertinent information and recognizes his own inability to solve the customer's problem(s). The next step is to gather other people to work on the problem (the number of people depends on the difficulty of the problem). They then discuss ideas, collect more information, test equipment, and eventually interact with experts from other organizations to address the problem. Task ID#: 100231

Teaches Others New Skills (F11)

Train junior technicians to test and put in systems. To perform the task, the inside equipment technician trains the junior person to test telephone line circuits and to pull the circuit schedule. The technician monitors the performance of the junior technicians to ensure on-time performance. Further, the technician teaches the junior staff how to use test equipment. Task ID#: 110161

Serves Clients/Customers (F12)

Interact with a customer who has filed a trouble report. To perform this task, the inside equipment technician first receives a trouble-report order on the computer screen. Next, the technician telephones the customer directly to ask questions, and listens to the customer's responses in order to obtain information relevant to solving the problem. If the information leads the technician to believe that the problem is not within his/her realm of control or that he or she cannot solve the problem, the customer is referred to another source. Task ID#: 120611

Work directly with customers to resolve their troubles. In order to perform this task, the inside equipment technician first gathers trouble reports from the trouble reporting center's database. This comes in the form of a customer information printout. The next step is to review the trouble and do testing, depending on the nature of the problem. The following step is to contact the customer and discuss the complaint so that the technician can understand what the customer is saying. This entails gathering further information from the customer. After the repair is made, further contact with the customer is established to ensure that the customer is satisfied with the repairs. Task ID#: 120231

Works with Cultural Diversity (F15)

Choose people to do a job based on their level of expertise and try to be sensitive to unrest among groups that are less skilled and therefore sometimes considered to be less important. To perform this task, the inside equipment technician does not expect less-skilled groups to perform higher-skill tasks and does not treat these groups as inferior. Task ID#: 150611

Troubleshoot problems with people of different cultural backgrounds. In order to perform this task, the inside equipment technician must consult other technicians and recognize who is effective for the given situation and problem, regardless of their cultural backgrounds. Task ID#: 150231

Understands How Systems Work (F17)

Help solve customers' problems. In order to perform this task, the inside equipment technician first determines whether the problem is related to the actual product or to the system. Then the technician addresses either the product or the support group. Next the technician identifies people in each network who are competent and who will be able to resolve the customers' trouble efficiently. Once this is done, the technician discusses problems with the developed network. Task ID#: 170231

Apply software changes to an active system (upgrade identical equipment). To perform the task, the inside equipment technician obtains software from the vendor. The technician goes to the disk file to identify patches and see if they have been sent. They backup the software and "take an image" to apply the software. The technician uses memory cards to ensure that there has been a memory match. The technician then drops the synchronization between the mirror central processing unit's to load software. The technician checks the patch instructions for details that may differ. Next, the technician applies the patch, matches memory, and resynchronizes. The technician performs a cold restart if necessary and monitors log reports for accuracy. Task ID#: 170161

Anticipates and Identifies Consequences (F18)

Realize that the steps one takes to deal with the trouble report which is being worked on will affect other groups' functioning. To perform the task, the inside equipment technician realizes that his/her actions will affect others. As a result, the technician notifies all of the interfaces to the system which is being worked on about what is happening and how it will affect their actions (what they can and cannot do as a result). The technician lets them know of these consequences ahead of time (i.e., the actions taken by the technician will slow down the computer). Task ID#: 180601

Monitors and Corrects Performance (F19)

Deal with a customer's complaint that he or she was getting a certain error when trying to access their telephone lines. To perform this task, the inside equipment technician works with others to find out the nature of the error. Next, the technician inputs into the appropriate switch the proper messages to correct the error. Although the error is corrected, the actions may cause a system malfunction which is recognized by monitoring the system. To correct the results of previous actions, technician must reinitialize the computer. Task ID#: 190611

Identify trends in switches so that you know that if a number of reports of a certain nature emerge and are not fixed, a trend will soon become problematic. To perform the task, the inside equipment technician recognizes the trouble history of a given switch or part. The technician diagnoses the equipment in trouble and sends out replacement packs. The technician also informs the repair people that even though the part will pass diagnostics, it should be changed based on its history. Task ID#: 190601

Identify possible trends or deviations which are critical to normal switch operations. To perform the task, the inside equipment technician looks at the printer to monitor the central processing unit, and logs in responses to audible alarms. The technician also reviews two hours of logs to look for suspicious trends, looks for visual alarms in progress (on the log) to determine when the alarm was generated, and troubleshoots the system. He or she then performs a post-mortem to learn from the event. Task ID#: 190161

Selects Appropriate Technologies (F20)

Choose the correct test equipment to troubleshoot a specific circuit. To perform the task, the inside equipment technician identifies the customer, system, and circuit to determine the type of test equipment to be applied. The technician looks at the function to be tested and determines whether or not the test passes by interpreting results and setting parameters. If the test fails, the technician must isolate the problem by changing the circuit card or calling other systems. He or she must repair the charge circuit or ask for help if the equipment needs to be selected and set up without being seen. Task ID#: 200161

Uses Machines to Monitor/Perform Tasks (F21)

Obtain verification of information already stored in the computer. To perform this task, the inside equiment technician communicates with the machine to get the needed information. After the information has been accessed, it is verified. In order to verify the information, it must first be interpreted. Therefore, the technician must understand the language of input/output messages and detect any errors in the information. Task ID#: 210611

Monitor the effect of upgrading a given set of software used to run the machine. To perform the task, the inside equipment technician first identifies what was not working in the previous generic that should work on the upgraded software. Next, the technician interacts with the supplier to get new coding to help the new generic run. Task ID#: 210601

Use a database for installation functions. To perform the task, the inside equipment technician logs in and pulls the group's work schedule. The technician then assigns configuring equipment to the circuit, looks to see that the circuit is ready for the test, turns the circuit over to the dispatch group to test on the other end, and turns the verified and tested circuit over to the customer. Task ID#: 210161

Truck Driver (Based on Five Interviews)

Truck Drivers ensure the care and safe delivery of packages to the customer. They organize the packages on the truck, deliver packages to customers/accounts, pick up packages from established accounts, collect money, document transactions, conduct check-out procedures (turning in money collected and signing off/on transactions), and fill out condition reports.

Functional Skills		Mean	Std. Dev.
F12	Serves Clients and Customers	5.00	.00
F01	Manages Time	5.00	.00
F17	Understands How Systems Work	3.80	1.30
F15	Works with Cultural Diversity	3.80	1.30
F10	Participates as a Member of a Team	3.60	1.14
F19	Monitors and Corrects Performance	3.20	1.48
F14	Negotiates to Arrive at a Decision	3.00	1.58
F06	Prepares Information	3.00	1.00
F13	Influences an Individual or Group	2.80	.45
F09	Employs Computers	2.60	1.82
F11	Teaches Others New Skills	2.60	.55
F18	Anticipates and Identifies Consequences	2.60	1.14
F21	Uses Machines to Monitor/Perform Tasks	2.40	1.95
F16	Questions the Status Quo	2.40	.89
F05	Identifies Information	2.20	.84
F08	Interprets Information	2.20	.84
F22	Maintains and Troubleshoots Technologies	1.80	1.30
F07	Converts Information	1.80	1.10
F02	Manages Financial Resources	1.60	.89
F20	Selects Appropriate Technologies	1.60	.55
F03	Manages Material and Facility Resources	1.60	1.34
F04	Manages Human Resources	1.00	.00

(Results for Enabling Skills on following page)

Enabling Skills		Mean	Std. Dev.
E15	Cooperation	5.00	.00
E04	Speaking Skills	5.00	.00
E12	Work Orientation	4.80	.45
E11	Ability to Learn	4.60	.55
E16	Conscientiousness	4.60	.55
E05	Listening Skills	4.40	.89
E03	Reading Skills	4.20	1.30
E08	Decision Making	4.20	.84
E09	Problem Solving	4.00	1.00
E01	Mathematical Skills	4.00	1.22
E13	Self Confidence	3.80	.84
E14	Social	3.40	.89
E06	Reasoning Skills	3.20	1.30
E07	Creative Thinking	2.80	.84
E02	Writing Skills	2.80	1.30
E10	Representing Information	2.00	.71

Job: Truck Driver

Manages Time (F01)

Sort packages prior to starting the delivery route. To perform the task, the truck driver takes the packages from a basket and sorts them. Next, the packages are placed in order of delivery and loaded onto the truck. The packages are delivered until the truck driver's route is finished. If all deliveries are not made by a specified time then the driver calls the dispatcher for assistance. Task ID#: 010451

Prepare a route to ensure that "next day air" packages are delivered by 10:30 a.m. The truck driver collects all "next day air" packages that must be delivered by 10:30 a.m., arranging them in the order in which they are to be delivered. The next step is to check and see if there are any other packages for those same delivery locations. He or she then fits the "next day air" stops into the route in such a way as to minimize disruption. When the packages are delivered, he or she removes the packing label and writes the time of delivery in the delivery record. Task ID#: 010291

Ensure that packages are delivered to the customer in a timely manner. The truck driver collects and sorts all packages that will be delivered that day and reads the mailing addresses. He or she proceeds to deliver the packages (both business and residential) based on the set route. If businesses are closed, he or she documents that and plans on when to return. He or she picks up parcels when convenient, noting that pick-ups must be made after 2:30 p.m. When the driver has been to all of the pick-up locations, he or she returns to the building and drops off the packages. Task ID#: 010301

Organize and execute package pick-ups. The truck driver must ensure that all pick-ups are completed before prescribed closing times. The truck driver looks at the pick-up manifest to see how many stops he or she has, organizing stops by geographical location to eliminate back tracking. The driver goes to the pick-ups that are closest to ready-time and at convenient locations. He or she then goes to the remaining pick-ups left on the manifest before the allotted closing time. Task ID#: 010401

Manages Material and Facility Resources (F03)

Stock the truck with supplies necessary for pick-ups and deliveries. To perform this task, the truck driver loads the truck with customer supplies (e.g. overnight letters, courier envelopes, air bills). The truck driver stacks the supplies in an orderly, systematic manner. Task ID#: 030401

Prepares Information (F06)

Maintain accurate delivery records. To perform the task, the truck driver records in the delivery record the address to which the package is delivered. The driver identifies the shipper's number and obtains the client's signature. If no signature is obtained, the driver documents where the package was left (i.e., front door). Task ID#: 060371

Match the delivery record with computer reports. To perform this task, the truck driver fills out the delivery record. Next, he or she runs and prints out the computerized reports. Driver then matches the delivery record with the computer reprints, and corrects any discrepancies. Task ID#: 060451

Employs Computers (F09)

Use the computer (super-tracker) to scan packages for relevant data. To perform the task, the truck driver assembles the packages and then runs the super-tracker over the bar code on the package. The driver then inserts the data collected in the super-tracker into the mainframe. The driver also scans the package at the time of delivery and continuously transfers the data in the tracker to another unit. Task ID#: 090451

Communicate with the express dispatcher using a computer (DADS unit). To send a message to the dispatcher, the driver hits the "forms 9" key on the computer unit, which gives him or her a message screen. The driver then types in his or her message to the dispatcher. The last step is to hit the "TX" button, which sends the message to the dispatcher. Task ID#: 090401

Participates as a Member of a Team (F10)

Serve as a member of the "Keeping our Reputation For Excellence" (KORE) Committee. The truck driver volunteers to attend regularly scheduled KORE meetings. He or she becomes active in a subcommittee (safety, sheet writing, complaints), offers ideas, and participates in special projects. The driver volunteers to participate because he knows it will improve customer service, promote the company, and offer a cost savings for the company. Task ID#: 100291

Sort late freight with co-workers. In the morning, a truck with late freight arrives at the hub. The truck drivers identify the need to sort these packages, informally divide the sorting task into subtasks (scan, stack, sort, pull bulk freight air bills), and assign themselves to the subtasks. They perform these subtasks until the late freight is ready to be delivered. Task ID#: 100401

Teaches Others New Skills (F11)

Teach a co-worker how to complete a Delivery Record Form (DRF) properly. The truck driver takes a co-worker's Delivery Record Form, inspects it, and finds some mistakes. He or she points out the discrepancies to the co-worker and then demonstrates the correct way to fill out the form. The driver watches the co-worker practice the actiity and provides feedback. Task ID#: 110291

Serves Clients/Customers (F12)

Identify potential sales leads. To perform this task, the truck driver observes a customer using the services of both the driver's organization and that of a competitor. The driver explains to the customer how competitive his/her company's features are and suggests that a sales representative call the customer. Finally, the driver performs follow up activities. Task ID#: 120371

Answer questions about the services offered by the driver's organization. To perform the task, the truck driver listens to any questions the customer has about services. The driver answers the questions, if possible, and offers an 800 telephone number for information about unanswered questions. The driver remains courteous at all times. Task ID#: 120451

Return to a regular pick-up stop if the customer is not prepared at the normal time. To perform this task, the truck driver goes to a pick-up location, finds a customer does not have a package ready, and determines how much time the customer needs. If the driver cannot wait, he or she assures the customer that he or she will return later in the day. The driver then continues with his or her regularly scheduled pick-ups before returning to pick up the package. Task ID#: 120291

Identify a specific package pick-up time for a customer. To perform this task, the truck driver must identify a specific package pick-up time by asking the customer what time he or she would like a daily pick-up. After the customer gives the driver a time, he or she checks his route schedule to see if the time is feasible. After a pick-up time is finalized, the driver documents it in the driver's log book. Task ID#: 120301

Arrive at a customer's location and identify an international-label air bill that has been completed incorrectly. To perform this task, the truck driver brings it to the customer's attention and shows the customer how to correctly complete the label. If the driver cannot wait for the package, he or she informs the customer of the closest drop-site. Before leaving, the driver gives the customer the customer service telephone number. Task ID#: 120401

Works with Cultural Diversity (F15)

Deliver a package to a Spanish-speaking customer. The truck driver goes to a delivery location and the customer does not speak English. The driver uses language skills (limited Spanish) to communicate the transaction. The driver completes the delivery by obtaining a signature on the delivery record. Task ID#: 150291

Communicate a job related task to a co-worker who does not speak English. An English-speaking truck driver must send a non-English speaking driver to a pick-up location. He or she first identifies on a map their present location, identifies the pick-up location by pointing to it on the map, points to the streets necessary to get there, and finally asks the other driver to show that he or she understands the instructions. Task ID#: 150401

Understands How Systems Work (F17)

Explain to a client how the overnight delivery procedure works. To perform the task, the truck driver provides the customer with information about the steps in the overnight delivery system. These are the steps: the client drops off the package; the driver scans the package into the system; the driver sorts packages and sends them to the airport; the packages are scanned and sorted at the airport; the packages are flown to the central hub where they are scanned, sorted and placed on the plane; after the flight, the packages are driven to the distribution station, where they are again scanned and sorted; and the packages are delivered to the customer. Task ID#: 170451

Anticipates and Identifies Consequences (F18)

Decide where to park the truck. To perform this task, the truck driver explores possible parking position options and weighs the pros and cons of each. Finally, the driver selects the best option. Task ID#: 180371

Monitors and Corrects Performance (F19)

Modify the route to maximize time efficiency. The truck driver draws a chart illustrating his or her daily route, noting the start point, end point, and stops in between. The driver rearranges the load chart and gives the new version to the pre-load supervisor. The driver then tries the new route and compares the times. If the new route is faster and more efficient, he or she stays on it. If it is not, the driver returns to the original route. Task ID#: 190301

Uses Machines to Monitor/Perform Tasks (F21)

Use the computer to communicate with the dispatcher. To perform the task, the truck driver signs in to the computer unit by inserting employee and route numbers. The driver obtains a display of stops assigned to a route by pressing certain keys. The driver transfers information from the super tracker to the computer unit. The driver asks the dispatcher if there are any more stops. If not, the driver signs off the unit. Task ID#: 210451

Maintains and Troubleshoots Technologies (F22)

Perform a pre-inspection of the vehicle. To perform the task, the truck driver must secure authority permits, vehicle registration, accident reports, and DOT safety equipment. Next, the driver checks the sound of the engine and scans the lights, brakes, gas, fluid (for leaks), signals, horns, and tires, making sure everything is in proper working order. Task ID#: 220371

Retail Sales Person (Based on Four Interviews)

Retail sales people take care of customers by handling sales, complaints, refunds and other transactions. They display merchandise appropriate for the store's standards, mark down merchandise according to prearranged sales, receive and ticket merchandise, maintain stock on the floor, answer customers' questions and ring up merchandise information in the register for purchased and returned items.

Functional Skills	Mean	Std. Dev.
F12 Serves Clients and Customers	5.00	.00
F17 Understands How Systems Work	4.75	.50
F15 Works with Cultural Diversity	4.25	.96
F11 Teaches Others New Skills	4.25	.50
F13 Influences an Individual or Group	4.25	.96
F10 Participates as a Member of a Team	4.25	.96
F03 Manages Material and Facility Resources	4.00	1.41
F06 Prepares Information	4.00	.82
F18 Anticipates and Identifies Consequences	4.00	.82
F08 Interprets Information	3.25	1.50
F01 Manages Time	3.25	1.71
F19 Monitors and Corrects Performance	3.00	1.83
F05 Identifies Information	3.00	.82
F14 Negotiates to Arrive at a Decision	2.50	.58
F16 Questions the Status Quo	2.50	.71
F07 Converts Information	2.25	.96
F04 Manages Human Resources	2.25	.96
F20 Selects Appropriate Technologies	2.00	1.41
F09 Employs Computers	2.00	2.00
F21 Uses Machines to Monitor/Perform Tasks	1.75	.50
F22 Maintains and Troubleshoots Technologies	1.25	.50
F02 Manages Financial Resources	1.00	.00

(Results for Enabling Skills on following page)

Enabling Skills	Mean	Std. Dev.
E04 Speaking Skills	5.00	.00
E14 Social	5.00	.00
E12 Work Orientation	5.00	.00
E11 Ability to Learn	5.00	.00
E05 Listening Skills	4.75	.50
E15 Cooperation	4.75	.50
E09 Problem Solving	4.50	.58
E16 Conscientiousness	4.50	.58
E06 Reasoning Skills	4.50	.58
E13 Self Confidence	4.25	.96
E03 Reading Skills	4.25	1.50
E08 Decision Making	4.00	.00
E01 Mathematical Skills	3.75	1.50
E10 Representing Information	3.50	1.29
E02 Writing Skills	3.25	1.50
E07 Creative Thinking	3.00	.82

Job: Retail Sales Person

Manages Material and Facility Resources (F03)

Order and maintain stock in the department by filling out inventory request forms. To perform this task, the retail sales person recognizes the need for certain items on the floor. He or she then completes the supply requisition form and inserts the completed form in the mailroom box entitled "Mailroom/Supplies." Next, he or she receives the supplies from the basement supply room and puts them away in the appropriate locations. Task ID#: 030121

Display new consumer goods. In order to perform this task, the retail sales person must first determine the location where the product will be displayed. The sales person must then move the existing merchandise to make space for the new products, being aware of how this placement will effect the other products. Next the sales person must determine the manner in which merchandise will be displayed. Finally, the sales person must set up the display according to previous decisions. Task ID#: 030221

Maintain the equipment used for tagging and for keeping the merchandise in order. In order to perform this task, the retail sales clerk makes sure that there are adequate supplies necessary for the maintenance of the merchandise. This means that the sales clerk makes sure that there are security tags for the merchandise, polish to keep shoes ready for the customers, clearance tags, shoe-size tags, staples, and try-on socks. Task ID#: 030151

Manages Human Resources (F04)

Prepare the daily break schedule. To perform the task, the retail sales person obtains a daily form, takes out the weekly schedule, places people in sections on the daily schedule (by department), assesses the workers' ability to run the cash register, schedules them so that there are no "holes" at the register or in a particular department, and posts the schedule. Task ID#: 010201

Identifies Information (F05)

Locate merchandise which is not currently available at the store for a customer. In order to perform this task, the retail sales manager must first decide upon a method of searching for information as to which other branch of the store has purchased the item in question. The sales person then searches for the information by employing one of the three following methods: using a computer to search for the information by answering the computer prompts about the item; calling a buyer and having his or her clerical staff look up the information; calling a vendor and having him or her look up which other branch of the store or which other competitors have the product. Task ID#: 050221

Handle undocumented customer refunds (no sales receipt received). To perform the task, the retail sales person looks at the garment tag for the brand name of the item. Next, he or she goes to the master price file with the information, looks for a description of the item, and obtains the correct price and identification number. If the store is out of the merchandise and/or the item is not listed in the book, the sales person calls another store to verify the price. Finally, the refund is completed. Task ID#: 060201

Prepares Information (F06)

Maintain the records of transfers and removals of stock. In order to perform this task, the retail sales clerk first reads memos or materials about preparing merchandise for shipping. Next the clerk prepares the written material which accompanies the merchandise (this material may include a disposal log and a manifest list). Lastly, the clerk prepares the merchandise for shipping. Task ID#: 060151

Interprets Information (F08)

Assimilate information at a seminar (style, trends in color, fabric), relate the information to specific customer needs, and communicate to the customer how the new trends can meet their specific needs. In order to perform this task, the retail sales person must first attend a seminar and gather information about new trends. The sales person then must organize the materials from the seminar. Next the sales person must examine the relevance of the material to each customer's needs and style preferences. Finally the sales person must communicate (via telephone, mailing or in-store interaction) the new trends to customers and how the customer can benefit from such trends. Task ID#: 080221

Employs Computers (F09)

Ring in a customer's purchase orders with the computerized cash register. To perform this task, the sales person basically responds to computer prompts to input the following information into the register: employee number, department/class, SKU or vendor/brand number, price of merchandise. Much of this information is found on either merchandise tags or on a register paper which lists the procedures for ringing up different brands. After all of the merchandise is put in, the final purchase price is totalled. Next, the sales person ascertains the nature of the transaction (cash/charge) and rings the appropriate key. If it is a cash purchase, he or she collects the money, counts it, and decides if change is needed. Then he or she punches in the amount given to the salesperson on the computer and gathers the correct change and receipt for the customer. Task ID#: 090121

Participates as a Member of a Team (F10)

Help avoid the layoff of a fellow sales person. In order to perform this task, the retail sales person reduces the number of hours worked during slow periods as a means of avoiding the layoff or firing of a fellow sales person. Task ID#: 100221

Interact and share opinions with other sales people in a department meeting. If necessary, the sales person offers grievances and if a sales procedure is unclear, the sales person asks for clarification on how to handle a certain situation. Task ID#: 100222

Teaches Others New Skills (F11)

Teach a sales person from another department how to locate the styles and color of pantyhose needed to match an item, when the pantyhose is not found in the department. To perform this task, the retail sales person shows the other sales person what the appropriate type of pantyhose looks like and where in the back stockroom they can be found, and then teaches the other person the proper procedure for stocking pantyhose (bring the rest of the box out of the stock room to the front). Task ID#: 110121

Train new sales persons how to use the register. To perform the task, the retail sales person keys the training mode code into the computerized cash register. Next, he or she models the following sequence for ringing up a sale: enters the employee number, enters the garment number and price (with bar-code reader), hits total-and-enter key, which totals the transaction; and adds tax. The sales person shows the trainee how to accept money and return change, then takes the register out of the training mode and supervises the trainee on a real transaction. Task ID#: 110201

Teach a new sales person how to set up and organize a "personal book" of customer information. In order to perform this task, the retail sales person must first show a personal book to the new sales person. Then the sales person must explain what materials are relevant and need to be recorded. Task ID#: 110221

Serves Clients/Customers (F12)

Help the customers decide what type of support pantyhose they may wish to purchase. To perform this task, the retail sales person asks the customers whether they prefer control top or not, and what colors are needed. The salesperson listens to a customer's needs and searches for the appropriate product. Task ID#: 120121

Handle a customer's return or exchange. To perform the task, the retail sales person greets the customer, listens to the problem or situation, offers helpful advice on how to solve the problem or simplify the procedure. If necessary, forms are filled out (such as return slips). The customer is then given the option of a refund or an exchange for a new garment. The manager is called in for the discussion if needed. Task ID#: 120201

Work with an out-of-town customer to obtain clothing for an upcoming trip/event. In order to perform this task, the retail sales person must first listen to the customer to identify his or her needs. Next the sales person must find the product that meets these needs. Then the sales person must arrange to have the product sent to the customer's home. Finally, the sales person must call the customer following the transaction to confirm the delivery and offer extra help if it is needed. Task ID#: 120221

Work with showroom customers. In order to perform this task, the retail sales clerk must communicate with customers in a positive manner. This usually involves being very diplomatic about what correct prices are (especially during a clearance sale) and what specials apply. The sales clerk must also provide positive reinforcement to customers so that they always feel the clerk is attending to their needs (e.g., the sales clerk is friendly with customers while they wait for a price check). Task ID#: 120151

Influences an Individual or Group (F13)

Persuade a customer to buy an extra amount of a "hard-to-find" color of pantyhose. To perform this task, the sales person first recognizes that a product is hard to keep in stock either because it is a popular seller or is out-of-season. Next, he or she explains to the customer why it may be difficult to purchase the given item at a later date, and how extra purchases now would be beneficial. Task ID#: 130121

Build on the initial sales encounter by influencing a customer to purchase additional pieces. In order to perform this task, the retail sales person must first point out to the customer the various benefits of the product already purchased. Next the sales person must offer items to extend the use of the original purchase. Task ID#: 130221

Works with Cultural Diversity (F15)

Translate European sizing measurements to American sizing for a foreign customer who wants to purchase a product. In order to perform this task, the retail sales person must call another source (i.e. the tailoring department) to try to obtain the cross-sizing information. Next the sales person offers the information to the customer. Task ID#: 150221

Understands How Systems Work (F17)

Solve a shipping mix-up. In order to perform this task, the retail sales person must first transfer the piece of clothing to another store by writing up a transfer form and having the item shipped. Next the sales person receives a call informing him/her that the item did not reach its destination. The sales person then looks up the shipping transfer number, and calls it in to the sender's shipping department to verify whether the item has been sent. If it has, the sales person calls the receiver's shipping department to check receipt. Finally, the sales person obtains the information on any mix-ups in the system's processing and shares that information with the appropriate source to solve the mix-up. Task ID#: 170221

Anticipates and Identifies Consequences (F18)

Move fixtures on the showroom floor to display merchandise. In order to perform this task, the retail sales clerk must know if a display would work and must be ready to change the display back, if the managers say to do so. The company has many rules and conventions, and all of the displays must conform to these conventions. Thus, the clerk has to be familiar with these conventions and anticipate if a specific display will conform. The sales clerk must also anticipate a manager's reaction based on the manager's mood. Task ID#: 180151

Monitors and Corrects Performance (F19)

Ensure the smooth flow of customers through the register line. To perform the task, the retail sales person observes the register lines and pages a new clerk if lines are too long. Task ID#: 190201

Selects Appropriate Technologies (F20)

Select fixtures for a display. In order to perform this task, the retail sales clerk has to be creative to determine what fixtures will work to display merchandise. This process may include borrowing fixtures from other departments. In selecting fixtures, the sales clerk must remember to make sure that the display has the desired outcome. This may involve ordering materials from other stores so that the display can be completed correctly. It also involves making sure that the displays conform to the company's standards. Task ID#: 200151

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The report also recommends that the qualities of high performance that today characterize our most competitive companies must become the standard for the vast majority of our companies, large and small, local and global. Decisions must be made closer to the frontline and draw upon the abilities of workers to think creatively and solve problems.

In order to accomplish this, the nation's schools must be transformed into high-performance work organizations in their own right. The report indicates what learning and teaching would be like in high performance schools and how the transformation could be made.

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WHAT WORK REQUIRES OF SCHOOLS

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